JUN 19 1979

U.S. Department of Housing and Urban Development
Office of Policy Development and Research

Fiscal Year 1980 Research and Technology Program

COMPLETED
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FISCAL YEAR 1980

RESEARCH AND

TECHNOLOGY PROGRAM

U.S. Department of Housing and Urban Development

Office of Policy Development and Research

INTRODUCTION

This brochure presents, in considerable detail, the 1980 budget of the Office of Policy Development and Research. It also describes our goals, which follow from the principle that the primary responsibility of a research and development office is to support the needs of the organization of which it is a part.

In order to carry out that responsibility, we have built our current research and evaluation agenda in an entirely new way. Previously, the agenda was an aggregate of research projects -- some designed by the Office of Policy Development and Research, some designed by other offices within HUD. As a result, the Office became involved in a number of "good idea" projects, but the agenda itself lacked coherence and direction, and it certainly lacked a sense of priority.

The building of our new research agenda began with discussions with the Secretary, the Under Secretary, the program Assistant Secretaries, and other principal staff. We asked: "What are the major goals of the Department of Housing and Urban Development in the Carter Administration?" Then we asked our colleagues to identify the problems needing solutions to meet those goals.

Nearly everyone agreed, for example, that the rising cost of housing remains a key problem and that increasing numbers of regulatory requirements were making it worse. In this example, we had isolated one of a number of problems and set a priority on it. A coherent research agenda can be expected to follow.

Despite the new approach, however, we continue to carry a legacy from the past -- a collection of tasks, some of them relevant, some of them less relevant, that fall outside our carefully considered priorities. There are, for example, Congressionally mandated projects -- the Housing Assistance Council, the studies for the Real Estate Settlement Procedures Act, and research on mobile homes and lead-based paint hazards. There are also reiterating and longitudinal studies which must be continued, the most important of which is the Annual Housing Survey. And there are multi-year studies, which require continued support if we are to gain anything of value from the money already invested. The aggregate of these four types of "mortgages" runs to 60 percent or more of our budget each year. It is from the relatively modest remainder that we have made current judgments.

We now have six primary research areas and two key evaluations on which we intend to focus. In addition, we have established a new division within this Office -- the Government Capacity Building Division -- that enables us to support some new and far-reaching initiatives.

RESEARCH AREAS

Urban economic development, public finance, and tax policy: We are looking at questions relating to the fiscal viability of central cities and how cities are affected by Federal policies. We are seeking to discover workable mechanisms for leveraging private-sector investments. We plan to examine the role of changes in capital investment by by cities, questions of development finance, efforts to coordinate available Federal and local resources, and the impact of Federal tax and grant policies on central cities.

Neighborhood reinvestment and revitalization: We are looking at the process of neighborhood change and a intervention techniques designed to preserve neighborhoods by preventing and reversing decline. For example, we are studying the roles of the private sector and local residents in promoting revitalized neighborhoods, issues of acquisition and disposition of abandoned property, and ways to stimulate reinvestment and mortgage lending in deteriorating neighborhoods.

Cost of housing: We are interested in looking at ways to reduce the component costs of housing (costs of developing, building, financing, and operating) as well as at ways to be more efficient in helping lower-income people afford housing through subsidy programs. The specific agenda for this research has been guided by the findings of the Secretary's Task Force on Housing Costs. We are examining the impact on housing costs of components such as local regulations, including building codes, environmental reviews, settlement costs, energy conservation, secondary finance markets, and large scale land acquisition and development. Costs and effectiveness of alternate subsidy programs are also important areas to be studied. This research will greatly influence the direction that that HUD housing policy will take in the next years.

Special users, elderly and handicapped: We are addressing how best to provide housing and housing-related services to people who have special requirements caused by age or physical condition. What are the optimal strategies for assisting these people? What service is essential to the success of special programs designed to reach them?

Specifically, we want to examine HUD's role in helping the elderly keep and maintain their own homes, and in helping handicapped people gain access to buildings. We will look at the housing-related services that elderly people consume and at the housing maintenance decisions that they must make. We will inventory the current housing situation to determine the extent to which people with disabilities have access to Federally subsidized housing. We will also examine the need for, and costs of, retrofitting public housing so that handicapped people will be assured of access.

Housing market discrimination and racial integration: We will be addressing issues of economic and racial freedom of choice in housing and learning how changes in demographics may affect trends in location patterns within urban areas. We will try to determine what interventions are feasible, under what conditions residential dispersion and mobility occur, and how to stimulate more imaginative designs to achieve freedom of choice. We will conduct an evaluation of site and neighborhood standards for HUD-assisted programs. We hope to determine how alternative guidelines will affect racial balance in the public schools, neighborhood transition, and the availability of social services. Of equal importance, we will examine how alternate site-selection policies might affect the composition of the population served by HUD's housing programs.

Alternative housing finance mechanisms: We are analyzing the economic impact of potential legislation on alternative mortgage instruments, regulation and reform of financial institutions, and conventional GNMA mortgage-backed securities. Consistent with the Tax Reform Act of 1976, we will study alternative tax incentives for encouraging construction of multi-family assisted housing. Our research will provide HUD with the capacity to develop initiatives as well as to respond to the many policy concerns in the housing finance system. We plan to convene panels of experts to help place the policy questions posed by HUD into the context of a larger view of the housing finance system. These panels will help determine where research can be particularly fruitful. This housing finance research is being carried out in close cooperation with Treasury and the Federal Home Loan Bank Board.

EVALUATIONS

Evaluation of the Community Development Block Grants: During 1980 we are continuing a market-by-market examination of the impact and users of Community Development Block Grants. It is an in-depth, longitudinal study, expected to last a total of four years -- the minimum time we think necessary to take detailed baseline measurements and then to examine change and effect as they emerge over time. We hope to obtain a better understanding of such key questions as: What is the profile of the beneficiaries? Which grant-supported activities induce the greatest private residential investment? How variable is private investment in relation to neighborhood condition and to economic condition in the metropolitan area as a whole? Have citizen participation requirements been sufficient to protect the interests of the poor and minority groups?

Evaluation of Section 8: The research we have been funding on Section 8 activities and on the characteristics of its participants is accumulating a sizable data base. From it we will assess the program's progress toward its legislative mandates. A first report of our findings is now available; we expect subsequent reports to provide measures of cost, beneficiaries, geographical distribution of the Section 8 housing units, characteristics of sponsors and occupants, and market impact. Our analyses will help us determine whether legislative changes are needed to improve the program, to broaden the client-groups its serves, or to re-direct its focus. Much of what we are learning from the Experimental Housing Allowance Program is also relevant to the Section 8 program, and we will be drawing upon it for this evaluation.

THE GOVERNMENT CAPACITY BUILDING DIVISION

Local Government Financial Management Capacity-Sharing Program: Having identified the problems facing local government officials as they cope with financial management, the Capacity Building Division has devised a program to help them improve their financial management capacity. The four areas of focus, which subsume 21 priority problems arrived at through the first half of 1978 by local officials themselves, are (1) budget and financial management, (2) accounting, auditing, and reporting, (3) treasury, debt, and pensions, (4) intergovernmental relations.

To deal with these areas, the capacity-sharing program is supporting training and technical assistance, national information sharing, a financial management resource center, and the publication of appropriate materials.

Additionally, the program is assisting State governments in revising and updating legislation covering local government financial management. It will also encourage Federal agencies to reduce the reporting burdens their regulations and requirements place upon local governments.

MINORITIES AND WOMEN

In this area we are involved in a number of initiatives. Through one project, we seek to help women and minorities enter the urban management profession at all levels of government. At this early stage, we have developed a few small projects, mainly of a fact-finding nature, to support this goal. Another focus is to identify the most significant barriers to the hiring and promotion of minorities in State and local governments and to advise the Department on ways to increase the hiring of women and minorities. With the help of the Urban Coalition and the Urban League, we are mounting joint efforts to increase the numbers of minority researchers working on housing and urban problems. Finally, our Women and Mortgage Credit project seeks to educate lending institutions about women's credit-worthiness while helping women, through a consumer education campaign, make informed decisions about their own participation in the mortgage market.

We are enthusiastic about the future of our work. To begin with, we are confident that we have developed a sound approach to building a research agenda. We are also satisfied that our staff is not merely capable of guiding this research but is flexible and knowledgeable enough to undertake much of it themselves. To support their efforts, we are adding each year a number of urban scholars, selected competitively from among those who apply to participate in our year-long visiting scholars' program. We are also bringing in an increased number of State and local government staff for one- to two-year assignments in our policy development and capacity building efforts. By temporarily adding members of academic institutions and State/local governments to our distinguished staff of permanent civil servants, we give our research and policy development programs unusual intellectual depth and practical dimensions.

We are also seeking diversity in the people and institutions that do our research by encouraging a mix of university and private profit-making firms, as well as minority and women researchers, to compete for contracts.

One further note about staffing. Like the Secretary of HUD, I am committed to affirmative action and equal opportunity. So far, 53 percent of the people employed during my tenure have been women; 37 percent have been minorities. Of our most recent group of visiting scholars, 25 percent (but more than half of those who applied) are women and nearly 17 percent are members of minority groups.

As we broaden the range of people and organizations that participate in our work, I believe our work will grow in strength and in sensitivity to current needs.

Recognizing that policy-makers cannot wait a year or two for answers to urgent questions, we have restructured our contract and procurement procedures so that we are now able to provide not only more traditional long-term research results but also 24-hour turn-around policy option papers. The innovative techniques that enable us to mix long- and short-term efforts allow us to respond instantly to the Secretary's various policy needs.

One of these needs is to judge the impact on urban areas of policies and measures proposed by the Department itself. This Office has already demonstrated its capabilities in this area by producing, and publishing, four trail-blazing urban impact statements that demonstrate the flexibility of our analytical resources.

The magnitude and breadth of problems we face are very great, but because our work will focus on a narrower range of key issues than previously, we hope it will achieve its results with greater precision than in the past and will be of the highest relevance to the Department and to those who are dependent on us for improved services.

Donna E. Shalala
Assistant Secretary for Policy
Development and Research

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DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

POLICY DEVELOPMENT AND RESEARCH

RESEARCH AND TECHNOLOGY

PROGRAM HIGHLIGHTS

	ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980	INCREASE + DECREASE - 1980 vs 1979
			(Dollars in Thousands)		
Obligations	$61,288	$62,000	$57,875	$53,000	-$4,875
Appropriations	52,000	62,000	57,500	53,000	- 4,500
Budget Outlays	50,834	57,000	53,300	53,800	+ 500

SUMMARY OF BUDGET ESTIMATES

1. SUMMARY OF BUDGET REQUEST

The 1980 Budget proposes an appropriation of $53,000,000 for the development and implementation of research, demonstration and evaluation programs administered by the Assistant Secretary for Policy Development and Research.

2. CHANGES FROM ORIGINAL 1979 BUDGET ESTIMATES

The 1979 appropriation request was reduced $4,500,000 by Congressional action. This reduction accounts for the adjustments in obligation and outlay estimates.

EXPLANATION OF INCREASES AND DECREASES

The Budget reflects a net decrease of $4,875,000 in the 1980 program level. The program level of $57,875,000 for 1979 includes projects to be funded from the 1979 appropriation of $57,500,000 as well as $375,000 of unobligated balance carried over from 1978. Significant items of change in obligations for contracts, grants and cooperative agreements for 1980 are as follows:

-- A net decrease in $318,000 in Housing Safety and Standards Research primarily due to greater reliance on in-house analysis of the results of lead paint hazards research and the completion of major mobile home construction safety standards research.

-- A net increase of $1,240,000 in Housing Economic Data and Analyses reflecting the growing number of secondary analyses and applications of housing production and marketing data obtained through the Annual Housing Survey.

-- A net decrease of $375,000 in Consumer and Equal Opportunity Research reflecting the completion in mid-1980 of the study of real estate settlement costs.

-- A net decrease of $8,379,000 in Community Conservation Research resulting primarily from the elimination of the need to transfer funds to the Urban Reinvestment Task Force. Beginning in 1980, the National Neighborhood Reinvestment Corporation (formerly the Task Force) will seek separate funding in 1980.

Research and Technology

-- A net increase in Energy Conservation and Standards Research of $500,000 which along with Department of Energy Transfer funds will initiate new research programs in the conservation of energy resources in the construction and operation of housing.

-- A net increase of $2,243,000 in Program Evaluation due to the expanded emphasis on comprehensive evaluation of all major Departmental programs.

-- A net increase of $379,000 in Research Program Support and Utilization primarily as a result of system improvements for access to and dissemination of completed research and evaluation project results.

Appropriations Request: The appropriation request is decreased by $4,500,000 as a net result of the changes given above, and the expectation that there will be no carry over funds.

Outlays: Outlays will be approximately the same for 1979 and 1980.

PROGRAM DESCRIPTION

1. Legislative Authority. Title V of the Housing and Community Development Act of 1970, as amended, authorizes and directs the Secretary to undertake programs of research, studies, testing, and demonstration relating to the mission and programs of the Department. In order to assure effective use of these activities, the Secretary is authorized to disseminate significant reports, data, and information to departments and agencies of Federal, State and local governments, to industry, and to the general public.

The 1980 program contains research in areas provided with separate authorizations for appropriations by the Congress. Among these are housing allowances, housing abandonment, lead-based paint hazards, and housing for those with special needs, such as the elderly and the handicapped. Because the general research authorization of Sections 501 and 502 of the HUD Act of 1970 is broad enough to cover such activities, these programs will continue to be funded under the Research and Technology appropriation rather than under separate appropriations.

Solar energy and other energy conservation activities are conducted in cooperation with the Department of Energy under HUD's general research authority, as well as that provided by the Solar Heating and Cooling Demonstration Act of 1974 and the Energy Conservation and Production Act of 1976.

2. Policy Development and Research Organization. The Assistant Secretary for Policy Development and Research (PD&R) is responsible for the development, planning, execution, and evaluation of HUD research and demonstration programs; for assisting in the formulation of Department policy; and for disseminating HUD research results. In addition, the PD&R organization has principal responsibility for providing program evaluation, economic and policy analysis, and staff assistance to the Secretary in determining national housing and community development goals, program priorities, and objectives.

PD&R administers the Research and Technology appropriation, which is HUD's largest single funding source for carrying out research and evaluations. PD&R also administers the residential demonstration portion of the national program for development of solar heating and cooling applications, and the development program for energy performance standards for new buildings. These energy programs are funded by transfers from the Department of Energy.

3. Goals of the Research Program. The HUD research program continues to concentrate its efforts on a narrow range of critical areas of major concern to the Department. This research agenda was developed jointly with the operating program areas and consists of the following six high priority areas: urban economic

development, public finance and tax policy; housing for the elderly and handicapped; neighborhood reinvestment and revitalization, and reversing decline in neighborhoods; freedom of choice in housing, including economic and equal opportunity; financial institution regulation and alternative housing finance mechanisms; and the cost of housing. As a major additional initiative for 1980, PD&R intends to expand its program evaluation efforts to include evaluations of key elements of every major operating program in the Department. Additional goals are to improve our ability to communicate and disseminate research results in order to encourage and stimulate interest and involvement in housing and community development programs, and to improve our capacity building efforts to upgrade the financial management capabilities of State and local governments.

PD&R actively seeks to involve and work with other concerned Federal agencies, State and local government officials, private organizations, universities, community groups, and individuals in the identification of solutions of pressing national problems. This is done by conducting research, demonstrations and evaluations which provide a better understanding of current and projected housing and community development processes and which develop, test, and publicize alternatives for use by the Department, other government elements, industry and the public. The program is a national focal point for such research, analysis, data collection, and dissemination.

4. Changes to Budget Structure. In Category I, Housing Assistance Research, a new sub-element 1.4, Assisted Housing Policy Research, has been added. This change results from the need to identify a set of housing assistance research projects that are not part of the Experimental Housing Allowance Program (section 1.1) but often utilize the EHAP data results along with the products of sub-element 1.2, Section 8 Research, as well as other data sources.

5. Program Synopsis. The following narrative program summary corresponds to the structure of the funding summary table on pages O-6 and O-7 and of the full program descriptions which begin on page O-8.

I. Housing Assistance Research. These research activities test new housing assistance programs and seek to improve the Department's existing assistance programs. In the Experimental Housing Allowance Program (EHAP) the field work will be completed two years earlier than originally planned, and analysis of the extensive data collected will be completed in 1981, fulfilling the original design objectives. Data and analytical products from EHAP will be merged with information from the Section 8 research program to suggest and evaluate potential improvements in the operation of current housing programs.

The Section 8 research program is an on-going effort to help policy makers and program managers increase the effectiveness and efficiency of the Department's major housing assistance program. Studies which will be underway in 1980 include an analysis of the development and operating costs of New Construction and Substantial Rehabilitation projects, and an evaluation of the administrative and management issues associated with conducting the Section 8 program in rural areas.

The objective of Housing Management research is to improve the management of HUD's assisted housing programs and to ensure that adequate housing services are provided to the low-income families served by those programs. Based on a comprehensive research agenda developed during the past year, research will address these primary problem areas: how to make delivery of assisted housing services more effective; devising improved methods for providing adequate funding of assisted housing operations; and improving the physical quality and maintenance of assisted housing stock.

II. Housing Safety and Standards Research. Work in this area tests and evaluates specific means to improve quality and reduce personal and financial risks for housing and mobile home occupants and owners, without prohibitively increasing

costs. Major categories include: research on improving the safety, durability, habitability and cost-effectiveness of existing and new housing systems and components; research into the nature and extent of lead-based paint poisoning in children, and methods for removal of this hazard; research concerned with improving the life safety and long term durability of residential mobile homes; and the identification, analysis and resolution of problems in the administration and enforcement of the many codes and standards which govern the nation's housing stock.

III. Housing Economic Data and Analyses. The projects in this area of research provide essential information about the quality and supply of the Nation's housing stock, housing and mortgage market trends, and demographic changes which relate to housing and urban problems. The information is used by HUD and other public and private decision makers to assess changing housing conditions and needs. The largest single project is the ongoing Annual Housing Survey. It measures changes in housing inventory and compiles data in both urban and rural areas on the physical condition of housing units, the neighborhoods in which they are located, and the characteristics of the occupants. Other work includes the effects of Federal and local tax policies on the production and location of new housing in housing markets, the preservation of existing housing and neighborhoods, the policy implications of new findings in theoretical and empirical urban economics, alternative housing finance instruments, and surveys of mortgage market activity.

IV. Consumer and Equal Opportunity Research. This research is conducted to improve HUD's equal opportunity and fair housing compliance programs by increasing available information about discriminatory practices and their effects, and by identifying and testing techniques to expand opportunities. Programs are also conducted to provide improved living environments for persons with special housing needs such as the elderly, the handicapped, and those living in small cities and rural areas. Activities aimed at improving homeownership opportunities for low- and moderate-income families through the development and testing of counseling and consumer information assistance are also carried out under these programs.

Specific projects include: an analysis of how the structures of the real estate and rental housing industries promote discrimination through control over information; a study of the economics of discrimination on the part of landlords and real estate agents; a continuation of the study concerning the housing satisfactions and adjustments of the elderly; the continuation of work on the development and demonstration of better methods of delivering housing and community development services to "hard to reach" rural areas; the completion of the demonstration of model land title recordation systems; and the evaluation of the cost effects of Section 504 of the Rehabilitation Act of 1973 on public housing. The results of the latter will be the basis for determining the potential future funding requirements for the "retrofitting" of public housing projects.

V. Community Conservation Research. This work studies dynamics of the residential environment and the effectiveness of policies designed to preserve or improve the quality of these environments. Building upon information gathered from the Urban Homesteading Demonstration and Evaluation, the Urban Reinvestment Task Force Demonstration and Evaluation, the Innovative Projects Program for Neighborhood Revitalization, and the Multifamily Sweat Equity Demonstration, projects will include: further study of private multifamily housing distress; a demonstration of the options of local governments in eliminating the blighting influences of abandoned properties on neighborhoods; follow-up work on neighborhood revitalization and the resulting displacement problems; a study of the impact of the implementation of the Neighborhood Strategy Areas program; and the testing of various means to improve neighborhood security through crime prevention programs. For 1978 and 1979, $4.5 million and $8.5 million respectively, is provided for the Neighborhood Reinvestment Corporation (Task Force). The Corporation is requesting separate funding in 1980 as authorized by the Housing and Community Development Amendments of 1978.

VI. Community Development Research. Programs are conducted to help State and local governments develop and adopt improvements in policy analysis and management techniques. Subject areas are public finance problems, the environmental impact of HUD programs, the patterns and trends in national and community growth and decline. Work will continue on financial management technical assistance and capacity sharing. Programs will be continued to encourage greater involvement of minorities and women in the management of State and local government. Research to assist communities to deal with the problems of economic development and public finance will focus on six key issues: urban capital infrastructure; public pensions; public-private linkages in economic development; the State role in economic development; land use and housing costs; and urban impact statements, with a substantially increased commitment of resources to this last issue. Environmental research activities related to housing, and urban revitalization and development will also be conducted.

VII. Energy Conservation and Standards Research. HUD, in cooperation with the Department of Energy and other agencies, has been encouraging the development and use of new energy conservation designs, methods, and standards for all types of existing and new residences, including mobile homes. The major new effort will be the updating of the regulations addressing Energy Conservation Standards for New Buildings. Another activity will address the feasibility of a proposed requirement that all existing dwellings must meet applicable energy efficient standards before sale or transfer. Cost-effective energy-conserving measures will be developed for the nation's stock of public housing. Work will be completed on the total energy system demonstration in Jersey City, New Jersey.

VIII. Program Evaluation. These efforts are designed to provide HUD's principal staff with timely and policy relevant information about the cost, impact, equity, and effectiveness of Department programs in achieving their goals. The 1980 evaluation plan recognizes the need to expand significantly the level of program evaluation. Work planned includes: a second round of the fair housing evaluation; evaluation of HUD's environmental policies; expansion of Fair Housing evaluation to Hispanics and other markets; Interstate Land Sales Registration program evaluation of the long-run impact of counseling; evaluation of NVACP's neighborhood activities; evaluation of multifamily property disposition techniques; and evaluation of the Community Development Block Grant and Urban Development Action Grant programs.

IX. Research Program Support and Utilization. These activities include the improvements of program control functions, the supplying of miscellaneous services which support more than one research program, the operation of the research management information systems, and the dissemination and transfer of research results.

RESEARCH AND TECHNOLOGY BUDGET SUMMARY
(Dollars in Thousands)

Research and Technology	ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980	INCREASE + DECREASE - 1980 vs 1979	PAGE NO.
I. HOUSING ASSISTANCE RESEARCH	$12,592	$11,350	$9,750	$9,800	+$50	0-8
1.1 Experimental Housing Assistance (EHAP)	7,738	6,850	5,250	4,300	-950	0-8
1.2 Section 8 Housing Assistance	2,447	2,200	2,000	2,000	...	0-10
1.3 Management of Assisted Housing	2,407	2,300	2,100	2,100	...	0-11
1.4 Assisted Housing Policy Research	...	...	400	1,400	+1,000	0-14
II. HOUSING SAFETY AND STANDARDS RESEARCH	3,736	3,510	3,210	2,892	-318	0-16
2.1 Residential Safety and Technology	1,367	1,535	1,435	1,542	+107	0-16
2.2 Lead Paint Hazards	1,027	825	725	400	-325	0-18
2.3 Mobile Homes	904	700	600	500	-100	0-19
2.4 Codes Administration	438	450	450	450	...	0-20
III. HOUSING ECONOMIC DATA AND ANALYSES	15,965	14,870	13,870	15,110	+1,240	0-21
3.1 Surveys of Housing	13,219	11,870	11,370	13,010	+1,640	0-21
3.2 Housing and Financial Market Studies	2,746	3,000	2,500	2,100	- 400	0-22
IV. CONSUMER AND EQUAL OPPORTUNITY RESEARCH	4,398	6,025	5,625	5,250	-375	0-24
4.1 Fair Housing and Equal Opportunity	820	850	850	900	+50	0-24
4.2 Housing Needs of Special Users	1,626	3,000	2,700	3,500	+800	0-25
(Housing Assistance Council)	(725)	(700)	(850)	(900)	+(50)	0-27
4.3 Housing Counseling and Consumer Aids	1,952	2,175	2,075	850	-1,225	0-27
V. COMMUNITY CONSERVATION RESEARCH	8,018	11,175	11,429	3,050	- 8,379	0-29

RESEARCH AND TECHNOLOGY BUDGET SUMMARY
(Dollars in Thousands)

		ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980	INCREASE + DECREASE - 1980 vs 1979	PAGE NO.
VI.	COMMUNITY DEVELOPMENT RESEARCH	9,295	7,150	6,650	6,435	-215	0-35
6.1	State and Local Policy Analysis	3,980	4,500	4,000	3,820	-180	0-35
6.3	Economic Development and Public Finance	4,242	1,750	1,750	1,600	-150	0-36
6.4	Environment, Growth and Land Use	1,073	900	900	1,015	+115	0-37
VII.	ENERGY CONSERVATION AND STANDARDS RESEARCH	1,928	1,400	1,400	1,900	+500	0-39
7.1	Energy Conservation in Buildings	882	750	750	1,400	+650	0-39
7.2	Solar Heating & Cooling	...	...	...	...	...	0-41
7.3	Utilities and Energy Systems	1,046	650	650	500	-150	0-43
	(DOE Transfers)	(32,515)	(21,600)	(21,660)	(6,350)	-(15,310)	
VIII.	PROGRAM EVALUATION	3,545	4,320	3,620	5,863	+2,243	0-45
IX.	RESEARCH PROGRAM SUPPORT & UTILIZATION	1,811	2,200	2,321	2,700	+379	0-51
9.1	Program Planning & Management	1,112	1,200	1,321	1,200	-121	0-51
9.2	Transferring Research Results	699	1,000	1,000	1,500	+500	0-52
	Total	61,288	62,000	57,875	53,000	-4,875	

I. HOUSING ASSISTANCE RESEARCH

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$12,592	$11,350	$9,750	$9,800

1.1 Experimental Housing Assistance

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$7,738	$6,850	$5,250	$4,300

Research and analysis under the Experimental Housing Allowance Program (EHAP) is now nearly complete. The last year of EHAP funding will be 1981 (see table below). During 1980, EHAP findings will continue to be merged with Section 8 research findings so as to contribute in the development of operational housing assistance policies.

EHAP has been carried out in accordance with the authorization of Section 504 of the Housing Act of 1970, as amended. There are three principal components to the EHAP: the Supply Experiment, the Demand Experiment, and the Administrative Agency Experiment. Another component, the Integrated Analysis, synthesizes the results from the three experimental components. As required by the Housing and Urban Development Act of 1970 and the Housing and Community Development Act of 1974, as amended, the Department submitted reports on EHAP to the Congress in 1973, 1974, and 1976. In addition to these, summary reports on findings from EHAP were published and delivered to the Congress in 1975 and 1978. Another will be prepared and delivered in 1979. A comprehensive report combining the final results from the Demand and Administrative Agency Experiments and interim results from the Supply Experiment will be completed in 1979; this will conclude the Integrated Analysis portion of the program.

The Supply Experiment seeks to determine how housing markets respond to an allowance program and is the only experimental portion of EHAP still in operation. This experiment is being conducted in the contrasting housing markets of Brown County (Green Bay), Wisconsin and St. Joseph County (South Bend), Indiana. After four years of operations, payments (using Section 23 program funds) have been made to over 16,000 households, both renters and homeowners.

The program has reached a "steady state" of operation with new participants equalling those who leave the program. It appears that about half of all eligible renters and about 30 percent of all eligible homeowners receive allowance payments at the steady state stage of the program. These findings on actual participation rates provide a factual basis for assumptions in planning all housing assistance programs.

The Demand Experiment, now completed, was conducted in two metropolitan areas and was designed to test how households used rental assistance payments under various program rules and payment formulae. Over 2,000 families received payments (from Research and Technology funds) during the three-year experimental period. Final reports will be received in 1979.

The Administrative Agency Experiment (AAE) was completed in 1977. Eight different public agencies of four types provided cash allowances for rents (using Section 23 program funds) to more than 6,000 families, over a two-year

period. The agencies, within certain guidelines, independently developed program variations which permitted assessments of important administrative tasks. These included outreach, income determination and verification, payments procedures, housing inspection standards, and the delivery of housing related services, such as housing market information and equal opportunity support.

AAE results include the means to gauge the effectiveness of a range of housing inspection methods, from professional inspection to inspection by the renting family. Similarly, for the first time, data are now available concerning the cost effectiveness of various income verification techniques. These findings are particularly relevant to any income-determined assistance program. A very brief summary of results across the three experiments suggests the following:

-- Cash assistance not tied to housing does little to improve the housing conditions of low income families who are living in inadequate housing.

-- Housing allowances, on the other hand, are more than an income transfer. They do induce some increased housing consumption in the short run. And given our normally high mobility rates, in the longer run they will induce more housing consumption when families make a move. But allowance incentives do practically nothing to speed up the moving process.

-- About half of the income eligible population would participate (receive payments) in a program open to all eligibles. It appears, however, that 80 to 90 percent would participate if housing quality requirements did not have to be satisfied.

-- Housing allowances do not stimulate much, if any, new construction, nor do they appear to cause rents or housing prices to inflate.

-- However, housing allowances do contribute modestly to the maintenance of the existing housing stock. They seem to encourage increased annual maintenance and thus, in the longer term, may serve to deter a process of costly deterioration which would ultimately require large dollar investments.

In 1980 the principal task of the Supply Experiment will be to continue analyses of market reactions to housing allowances and of interactions between consumers, housing suppliers, and market intermediaries. Survey operations are now complete and all monitoring of participants will be finished by December 1979. Subsequent activities will involve completion of analyses and data documentation by the end of 1981. The extensive data base which has been generated in EHAP will be released to universities and others in the general research community soon after the primary analyses are completed.

Total estimated costs for EHAP have again been reduced. When completed in 1981, the program obligations are expected to total $163.1 million as compared to the $173.3 million estimated in the 1979 budget. While a lower than estimated participation rate in the Supply Experiment is the primary reason for the reduction, the research costs have also been reduced. These lower research and technology estimates are a result of the elimination of two annual housing market surveys (from 6 to 4) in each of the Supply Experiment sites. Current estimates are summarized below:

Research and Technology

	ACTUAL CUMULATIVE 1978	ESTIMATE 1979	ESTIMATE 1980	ESTIMATE 1981	Total
		(Dollars in Millions)			
Research and Technology Obligations.....	$78.1 a/	$5.2	$4.3	$1.4	$89.0
Section 23 Payments.....	45.1	13.6	11.3	4.1	74.1
Total.....	123.2	18.8	15.6	5.5	163.1

a/ Includes $3.6 million in allowance payments to participant families in the Demand Experiment.

1.2 Section 8 Housing Assistance

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$2,447	$2,200	$2,000	$2,000

The objective of the Section 8 Housing Assistance Research and Evaluation is to provide the Department with continuous information on the operation of the Section 8 program, to identify problem areas and potential solutions, and to provide a basis for program improvements.

The first phase of this program, initiated in 1976, concentrated on the Existing Housing component of Section 8. A report to be published in 1979 summarizes this first study's findings and includes detailed statistics on the demographic income characteristics of participating families, on changes in housing expenditures for these families, and on the experiences of families who search for new housing units. These findings, combined with those from EHAP, have been used extensively in evaluating the performance of the Section 8 Existing Housing program.

The findings from the first phase of the research program indicate that the Section 8 Existing Housing program has achieved some early successes in terms of its statutory objective and its impacts on people and housing units. Some of the principal findings follow:

-- Recipients were generally representative of the eligible population except that there was a disproportionately large share of elderly women and non-elderly female-headed households with children participating.

-- About half of the recipient households had members who were elderly, handicapped, or disabled.

-- One-third of all recipients changed neighborhoods.

-- The most important reason cited for moving was to reduce overcrowding.

-- For the average recipient, housing expenses were reduced by approximately half, from over 40 to 22 percent of gross income.

-- Under the program, the average recipient's out-of-pocket contribution was was $67 per month, and the average government subsidy was $103 per month.

-- On the average, program recipients were contributing $55 per month less for rent than they were before becoming recipients.

-- The program recruited many owners and managers of properties who had not not previously participated in a federally-sponsored housing program, especially landlords owning a very small number of units and landlords occupying units on the same property as Section 8 recipients.

-- Landlords did not consider Section 8 recipients to be problem tenants. At least 90 percent of the landlords found Section 8 tenants equally or more responsible than other tenants in maintaining property, paying rent, and getting along with neighbors. Ninety percent of the landlords also would consider leasing additional units to Section 8 recipients.

-- Thirty-seven percent of all units ultimately subsidized required repairs (41 percent of movers' units and 33 percent of stayers' units).

-- All those involved in the program at the local level--participating households, households who applied but were unable to participate, landlords, and local officials--expressed a high degree of satisfaction with the way the program was administered.

A second phase of Section 8 research began in late 1978 and will continue in 1979 and 1980. This effort is concentrating more heavily on the New Construction and Substantial Rehabilitation components of the Section 8 program, as well as continuing with issues related to the Existing portion of the program. Studies underway include an examination of the effect of all portions of the program on changes in housing quality of participants and on racial and economic integration, based on an on-site inspection of the housing occupied by families before and after entering the program. Detailed analyses of participation patterns are also included. Analyses of the program in both metropolitan and rural areas are continuing. The findings of this study will be reported in 1980.

A study begun in 1979 is comparing development and operating costs of new and substantially rehabilitated Section 8 projects financed and sponsored in different ways, and is looking for opportunities for controlling those costs. This study will be in an exploratory phase in 1979, with major field data collection planned for 1980. Also expected to begin in 1980 is a series of case studies of the administrative practices and administrative costs of public housing agencies subsidizing families through Section 8 Existing housing.

1.3 Management of Assisted Housing

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$2,407	$2,300	$2,100	$2,100

In recent years, federally-assisted low- and moderate-income multifamily housing--both public and HUD-insured--has been faced with a number of severe operating problems which have threatened the financial viability of some projects and impeded the effective management of all. Such problems as rising

operating costs, inadequate project revenue, deteriorating physical structures and surrounding neighborhoods, and ineffective management practices have created serious distress in these projects. This has led to inadequate housing services for project residents, neighborhood instability, and, in the case of HUD-insured projects, mortgage default. The research program for assisted housing management is designed to address these problems, identify the nature and causes of distress and to develop, demonstrate, and evaluate means to alleviate distressed conditions and improve management practices. Whereas much of the early research in this area involved the testing of specific remedies for individual housing management problems, current research activities are aimed at devising broader strategies for improving assisted housing operations. These strategies focus on improving the financial health of assisted housing, providing better quality housing services and maintaining the integrity of the physical stock. For projects which are in default, the research emphasis is on methods of property disposition which maximize resident and community involvement.

Prior and current work on distressed and defaulted properties, funded under section V (Community Conservation Research), has provided substantial insights to planning of the work under this section. Although the funds for that work will be accounted for in section V, the primary discussion of it will be in this section because the work is so closely related, and it makes sense to report on them together.

Public Housing Management Research

Under the U.S. Housing Act of 1937, over 1.1 million public housing units have been constructed to provide decent housing for the nation's poor. However, the Public Housing Agencies (PHAs) which manage these units have been increasingly burdened with a wide range of financial, management, physical, and social problems which hinder their effective management performance. The research program for public housing is designed to address these problems in the following three areas:

(1) More effective delivery of public housing services. Two projects which are currently underway will continue through 1980 to develop and test innovative methods for improving public housing management.

One of these is the development of training programs for housing managers. This will include a program to train non-Hispanic managers of largely Hispanic public housing projects to meet the special needs of this group. It will also provide advancement opportunities for Hispanic managers. The evaluation of the Tenant Management Program, which concludes its demonstration phase in 1979, will also carry over into 1980. The test of this concept in a "real world" situation will occur in the next phase as the public housing agencies and tenant management corporations involved in tenant management assume responsibility for directing their own programs.

Other research in this field is examining public housing operations and management performance to determine the most effective methods of providing public housing services.

In 1980, these studies are expected to isolate the critical factors affecting management performance. Current management methods will be analyzed to identify those administrative practices which are most effective and least costly. This will provide a data base for developing performance standards and adequate service levels for public housing. Future research will identify the appropriate management policies and programs needed to provide the improved service delivery embodied in the new service standards.

(2) Adequate funding levels for public housing operations. Work in this area will build on the above research, as well as the findings of an evaluation of the Performance Funding System (PFS), which is currently underway. The major aim of this research in 1980 will be the development of an improved mechanism for allocating operating subsidies to Public Housing Agencies. It is expected that such a mechanism will better relate costs to service delivery levels and at the same time provide incentives for improved management.

(3) Adequate maintenance of the public housing stock. The analysis of the rehabilitation requirements of the public housing stock which began in 1978 will continue in three areas: (a) meeting the requirements of Section 504 (Rehabilitation Act of 1973) accessibility standards; (b) retrofitting for energy conservation; and, (c) modernization. This analysis will provide an estimate in late 1979 of the cost and scope of modifications needed to meet these three requirements. Based on this study, research activities in 1980 will be undertaken to develop minimum standards of quality applicable to the public housing inventory. Future work in this area will focus on alternatives for meeting the physical improvement and ongoing maintenance requirements of public housing.

HUD-Insured Multifamily Housing Research

As indicated above, work whose funding is reported under section V, Community Conservation Research, will be discussed here because of its close inter-relation to the work of this section.

Research on HUD-insured multifamily housing is examining a broad range of creative approaches for resolving both the financial and management problems of distressed properties. These research efforts are related to the new Troubled Projects (Flexible Subsidy) program. It seeks ways to dispose of defaulted properties in a manner designed to involve project residents in the property disposition process and strengthen the surrounding neighborhoods. During 1980, the following research and demonstration projects will continue the testing of three of these approaches:

(1) A Demonstration to Develop a Comprehensive Diagnostic and Treatment Program for Distressed Federally-Assisted MultiFamily Projects in the New York Area. This project builds on a previous demonstration in the New York area in which multi-skilled teams designed and carried out comprehensive audits of a set of distressed federally assisted multifamily projects. They identified project problems, developed treatment programs and provided hands-on technical assistance in implementing work-out plans. Generally, this intervention resulted in financial relief and improved property management operations and physical improvement. The diagnostic and technical assistance techniques developed in that research will be tested in an operating framework through a preventive servicing program for selected project recipients of Section 8 operating subsidies. The objectives of the demonstration are to produce prototypical formats for conducting project audits through analysis of key distress indicators including financial, physical, administrative, and social conditions. It will develop standard elements for work-out plans for project stabilization on the basis of these field tests. It will provide on-site technical assistance to aid in implementing workout plans. It will produce research and policy papers highlighting the causes of distress among HUD-insured projects and analyzing the prospects for securing longer term project viability. In addition, a study of Section 207 middle income HUD-insured projects will continue into 1980 to determine the causes and extent of distress and to recommend alternative remedies for these projects. Finally, technical assistance will be designed for implementing and monitoring housing assistance programs in neighborhood stabilization areas. Owners, managers, mortgagees, tenant associations, community groups and tenants within a neighborhood stabilization area will be offered a housing assistance program geared to their specific needs and responsibilities. Instruments developed through this set of demonstrations,

such as the audit format, and the training program designed for HUD New York Area loan servicing and management personnel, will continue to be refined and tested into 1980, to assure effective replication outside the New York area.

(2) Region IX MultiFamily Demonstration Program. This research was initiated in 1977 to demonstrate methods for remedying problems in distressed Region IX multifamily housing projects. This demonstration, like that in New York, entails the performance of comprehensive audits in selected multifamily projects to identify the causes of financial distress, leading to recommendations of actions required to remedy the problems identified. Of particular interest will be how the diagnostic tools developed independently by this research team are similar or different from those in New York. On-site technical intervention and assistance is then provided to implement the team's audit recommendations. These activities provide the basis for papers which will describe alternative techniques for resolving problems facing distressed projects and which analyze Federal and State statutes and regulations which may limit proper financial management and operations of subsidized housing projects. Workshops will be conducted for HUD staff and State officials on the issues addressed in these audit papers. Further testing of comprehensive audit and technical intervention for replication elsewhere will continue in 1980.

(3) Demonstration of New Approaches to the Management and Disposition of HUD Acquired MultiFamily Developments. Initiated in July 1978, this demonstration calls for the Boston Area HUD Office to contract with multi-skilled teams at six HUD-acquired developments in the City of Boston. It differs from the New York and Region IX demonstrations in that no attempt is being made to develop new diagnostic tools; it is a straight demonstration of available technical assistance methods. The teams provide management services, train and employ tenants in maintenance and project operations, and develop alternate property disposition options, including the feasibility of resident-controlled ownership. A consultant group is providing the technical assistance, monitoring and evaluation services, as well as assistance to HUD for involving local public and private groups in the property disposition process. Unique to this demonstration is the use of on-site resident skills and resources in resolving management and disposition problems of formerly subsidized properties. The final report, due in 1980, will analyze the feasibility of replicating the demonstration techniques. During 1980, the potential will be evaluated for developing within HUD field offices the skills and resources required for effective management and disposition, instead of relying on outside experts.

1.4 Assisted Housing Policy Research

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
...	...	$400	$1,400

This new budget category reflects the need to separately identify a growing volume of housing assistance research not directly associated with the Experimental Housing Allowance Program (EHAP).

As originally conceived, EHAP was designed to answer a set of clearly stated objectives, which responded to the legislative mandate. The experimental program was carefully scoped and controlled to address the priority questions of that time. Since then, as the program matured, it became obvious that other issues and questions of equal or greater concern were arising. This budget category will draw heavily on a merging of the Section 8 Research and Evaluation, EHAP, and other significant data bases, such as the Annual Housing Survey and the Census. Over

the past five years, the Department has acquired a huge volume of raw data on housing processes never previously available. Drawing out the trends and lessons in this material offers great promise for further insight into housing market behavior and improved policy making. While this research and analysis is related to categories 1.1 and 1.2, the scope is broader than the more narrow focus of EHAP.

A number of research projects have been initiated. One involves basic research on the nature of housing markets, the production of housing services, and the nature of the demand function for housing. To a large extent this project will use data generated from EHAP, particularly from the Supply Experiment. These analyses differ from and are not within the scope of EHAP. It is anticipated that they have the potential of providing policy makers and housing researchers with a much better understanding of the underlying forces operating within housing markets generally, and the Department's housing programs specifically.

Another project in this category includes the implementation and operation of a Housing Research Data Bank, which will provide access to the extensive data bases now available to universities and others in the housing research community. This data sharing is expected to provide a much greater return from the investment made in HUD's research as a result of analyses by other independent researchers that would not ordinarily be supported by HUD.

As an illustration of the way merged data will be utilized, the potential of an incentive system for recipients in the Section 8 Existing program to help keep rent increases at reasonable levels has been analyzed based on EHAP and Section 8 research. In EHAP a very strong incentive operated; a weaker incentive in the Section 8 program proved ineffective. Through analyses of the combined data bases, recommendations were made to modify the Section 8 program.

These are examples of activities to be pursued in this area. In general, the studies will fit in the following two categories: assisted housing program administrative issues, such as PHA fees, housing inspections, and income verification; and assisted housing program comparisons.

II. HOUSING SAFETY AND STANDARDS RESEARCH

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$3,736	$3,510	$3,210	$2,892

2.1 Residential Safety and Technology

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$1,367	$1,535	$1,435	$1,542

The major objectives of this category are to develop improvements in housing design and safety and to search for cost savings in the construction of housing through new components, systems, and techniques.

(1) Improving Housing Design and Construction. The encouragement of the use of new technology involves the development of the technology, testing and demonstration of its capability, and acceptance of its use. In order to gain acceptance, new technology must be clearly defined and developed. It must be analyzed, tested and shown to be practical and cost effective to code authorities, financing institutions, home builders, and homeowners. Recent research and demonstration accomplishments include: criteria and standards for the use of a particle board and veneer substitute for lumber; new techniques for constructing houses safely on unstable soils; a manual for avoiding or treating leaky basements; guides to assist the designer, the builder, and the homeowner in the prevention of wood damage from termites and other decay; demonstrations in energy efficiency in residential dwellings; demonstrations in the use of water-saving and sewerless devices; studies in the retrofitting of sewage disposal drainfields; a manual on codes and financing for the construction of underground houses; criteria for construction of wood-trussed floor systems; demonstrations in the use of innovative wiring systems; design and methodology studies in the use of structural plastics in building construction; and the initiation of an annual Residential Building Technology Awards Program (RBTAP) to highlight cost saving techniques in residential construction.

Research and demonstrations in 1980 will emphasize the importance of the component systems that make up the building and the integration of those systems with each other and the building. This will involve studies in systems coordination as well as modular construction. An example is the modular dimensioning of kitchen cabinets manufactured on a scale which allows for minor adjustments and the flexibility required at the on-site assembly. Full scale demonstrations will be conducted to introduce selected new and innovative technologies to the building industry. A program will be developed for the testing of building assemblies and components which is vital for performance oriented building standards.

Research will also be directed to housing maintenance and rehabilitation issues. These will include the development of a feedback, data collection method (to show where the most severe maintenance problems exist), the development of improved repair techniques and strategies for cost-effective rehabilitation, and a more systematic determination of the highest priority problems and needs in the repair and maintenance industry in order that better building practices may be created to diminish these key problems.

(2) Demonstrations of New Building Technology. Demonstrations are necessary to test newly developed technology in use and to assess the impact of recent building research on materials and systems, life styles, codes, financing practices, and local customs. In past years, demonstrations showed how the design of single family houses can be modified to increase energy efficiency, and experimented with the use of sewerless devices. Demonstrations in 1980 will involve more sophisticated sewerless devices, integrated mechanical/electrical systems, and several innovative plumbing, wiring and heating systems, with emphasis on demonstrations of components rather than on total systems. A demonstration based on the use of the metric system in house design will be conducted if the industry elects to go metric.

(3) Building Design Safety. Studies will continue in the areas of progressive collapse, and the design of buildings on unstable soils. The refinement and validation of the preliminary "Building Firesafety Model" during 1979 will provide the Department with a systematic procedure for comparing alternative building designs to present day firesafety standards. During 1980 the model will be further use-tested by involving city and town building code groups and fire officials in its final development.

In 1979 projects will be initiated to improve the knowledge and skills of those involved in disaster housing operations; a manual of design and construction standards is being developed for residential buildings in high-hazard coastal areas; projects on earthquake resistant design will be completed; a manual for builders in seismic areas will be published; and an improved basis for reinforcing masonry in seismic areas is being developed.

Disaster research in 1980 will be reduced significantly due to the transfer of the HUD disaster housing function to the new Federal Emergency Management Agency. Work on residential seismic standards will continue, and there will be increased coordination with the National Science Foundation and other Federal agencies involved with general seismic research.

(4) Performance Feedback. Until now, the Department has had no formal method for determining research needs in building technology. There has been no information gathering system to determine how our existing technology is functioning. The Department has a tremendous inventory of insured residential structures from which to gather this information. There is also an existing, but limited complaint system in the Section 518 program. This will be built upon to help determine where in-use design and construction problems are, and which of those occur most frequently.

In 1980, more comprehensive systems for obtaining the feedback of information on building defects will be investigated for possible adoption by HUD. A feedback procedures manual will be developed and proposed for use by PD&R.

(5) Maintenance and Rehabilitation. Research will be conducted in an attempt to find how advancing technology can be better harnessed to assist the rehabilitation of residential structures. Rehabilitation has not become systematized and yet there are many potential elements of design, procurement, scheduling, and product development that may be effective in rehabilitation. This will be the beginning of a program for a more scientific approach to the technology of rehabilitation construction and is intended to dovetail with the rehabilitation industry and other HUD financial research. A related program of maintenance is planned which will aid the homeowner. It will develop guidance and instructions for a system of preventive maintenance, listing all items needing periodic inspection and care.

2.2 Lead Paint Hazards

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$1,027	$825	$725	$400

There is new evidence that lead poisoning and elevated blood lead levels in urban children are decreasing significantly. Public health officials continue to show concern for this problem, but emphasis is now shifting to the long range effects on children whose lead levels are only slightly or moderately elevated. Most environmental experts currently agree that lead exposure comes from many different sources, but still feel that lead-based paint remains as one of the major sources.

Research by HUD on the nature and extent of lead-based paint poisoning in children, and methods for the removal of the hazards to which they are exposed, is mandated by the Lead-Based Paint Poisoning Prevention Act, as amended. HUD activities have pursued three inter-related objectives:

-- To develop less costly means for detecting lead-based paint and for reducing the hazard;

-- To determine the circumstances which contribute to lead poisoning;

-- To provide technical assistance and resources to aid health and housing agencies confronted with lead poisoning hazards.

The Department has initiated an in-depth evaluation of its research program to identify the progress made, correct any errors and misdirections, and to redefine objectives, so that the control of elevated lead levels in children is accomplished with speed and efficiency.

The evaluation has two parts. The first is a self-evaluation by the in-house program staff. A report, "Lead-Based Paint Poisoning Research - Review and Evaluation - 1971-1977," was published in 1978.

Second, to obtain an evaluation of the research program and how the Department's own work relates to the research of other Agencies concerned with lead in the environment, HUD has contracted with the Environmental Studies Board of the National Academy of Sciences to assemble a panel of scientific experts to accomplish two objectives:

1. To produce an authoritative, comprehensive assessment of the critical scientific and technical issues concerning hazards caused by lead in paints and other environmental lead sources;

2. To examine research needs and the research programs of HUD and other Federal government agencies on the subjects of lead poisoning and environmental lead exposure, and to evaluate and recommend both scientific approaches and organizational and managerial strategies for research in those areas for HUD and for other elements of the national research effort.

The Academy's report is due July 1979.

Research conducted in 1978 and proposed in 1979 in developing and testing new technology for lead-based paint hazard abatement has been considerably reduced over previous years. However, some new technology development was initiated, including

improved closed cycle abrasive removal of paint, use of electric paint scrapers, and several different types of wall coverings. Primary emphasis was given to the collection and analyses of data which would provide insight into the nature and extent of the problem, and changes in the perception of the problem which have taken place since Federal involvement started in 1971. Much of this work was done in-house and the results were of extreme usefulness in HUD, and were used extensively by EPA in promulgating their recent air/lead standard.

Pending receipt of the National Academy of Sciences' recommendations, research will proceed at a steadily declining rate. This results from a shift from demonstrations, which are more costly, to funded studies and in-house analyses. In 1979 and 1980 efforts will continue on the development, testing and demonstration of new hazard abatement technology already started. Additional work will be carried out in the collection and analysis of data on the nature and extent of lead problems in urban areas. Much of this work will be done by increased cooperative projects with other Agencies and by in-house effort of PD&R staff.

2.3 Mobile Homes

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$904	$700	$600	$500

This research is concerned with improving the life safety and long-term durability of mobile homes. It supports the Department in its regulatory responsibilities pursuant to the National Mobile Home Construction and Safety Standards Act of 1974 (Title VI). It also provides the necessary research to enable the Assistant Secretary for Housing to develop policy and regulations relating to mobile home mortgage financing.

Conducted in cooperation with the Assistant Secretary for Neighborhoods, Voluntary Associations, and Consumer Affairs, the research is performed to (1) judge the adequacy of relevant portions of the Federal Mobile Home Construction and Safety Standards; and, (2) to recommend and justify proposed changes to improve these standards.

In 1979, significant research projects will be completed which will provide recommendations to improve: (1) mobile home fire space safety; (2) structural resistance to storms and hurricane winds; (3) long term durability; and, (4) energy conservation. The fire space safety recommendations relate to emergency egress windows. The wind-safety recommendations concern the home's resistance to upset and sliding. The long-term durability improvements reduce the adverse cumulative effect of moisture and water damage. Full scale testing of mobile homes in northern and southern areas provided recommendations to HUD and the Department of Energy concerning improved performance. Other work being completed involves electrical safety and the use of plastic plumbing systems.

Research is also being conducted on the adverse cumulative effects imposed upon a mobile home by highway transportation forces and site-installation activities. Both metal and composition-type roofs are being tested in order to evaluate long term durability in terms of corrosion, ponding, sagging, etc., which in turn cause roof leaks.

In December 1979, a major 4-year research effort to develop practical Federal Mobile Home Construction Safety Standards will be essentially accomplished. However, since Title VI specifies that objective research be undertaken to further improve these standards, a sustaining requirement exists for PD&R to provide such support on a more limited scale.

Research and Technology

In 1980, work on building safety will: study ureaformaldehyde vapor effects; determine the applicability of "reference standards" to the parent standards; and develop a computer-assisted "predictive model" to predetermine the effects of accidental fires upon the mobile home, thereby possibly replacing the present full or partial scale fire testing methods.

In 1980, work on durability will provide the basis for tests and evaluation of the capability of single-wide and multi-wide mobile homes to achieve considerably longer periods of useful life. This research will also assist the Title I (FHA) program in developing policy and regulations relating to the underwriting of longer mobile home loans. The interaction of energy-conservation policy and regulations (particularly "Title III--Thermal Performance Standards") with the requirements of Title VI, require further integrated research between these two statutory mandates for both structural durability and fire safety.

2.4 Codes Administration

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$438	$450	$450	$450

Codes administration research has as its general objective the identification, analysis, and resolution of issues associated with the administration and enforcement of the multiple codes and standards which govern the housing stock.

The current focus of this effort, initiated in 1977, is the development of a certification test and a comprehensive professional education curricula for building code officials. Both of these aim at setting voluntary, national, minimum professional standards for such officials and to raise the quality of their performance. Another project is analyzing overlap and duplication of the HUD Minimum Property Standards (MPS) with the requirements of local residential codes to work towards more coordinated and simplified residential building regulation.

In response to a 1978 Congressional mandate, HUD began the development of rehabilitation guidelines intended for voluntary adoption by States and local governments for use with existing building codes. The guidelines will contain technical data and model provisions which State and local governments can use to modify their building codes so as to encourage rehabilitation. In October 1979, HUD will publish for public comment the proposed rehabilitation guidelines. The final rehabilitation guidelines are expected to be published in April 1980. The Department will continue to identify and attempt to resolve conflicts about provisions in building code regulations which add cost without improving safety. In 1980 HUD will complete the analysis of MPS and the requirements of local single family dwelling codes to provide a basis for coordinated and simplified residential building regulations.

III. HOUSING ECONOMIC DATA AND ANALYSES

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$15,965	$14,870	$13,870	$15,110

3.1 Surveys of Housing

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$13,219	$11,870	$11,370	$13,010

Housing and financial market data are indispensible in the formulation of housing and community development policy.

To meet the need for reliable and up-to-date information, PD&R developed and now monitors several major data series on national, regional, and local economic and housing market conditions. These series, developed and financed by HUD, include the Annual Housing Survey, Survey of Market Absorption of New Apartments, Survey of New One-Family Houses Sold and for Sale, Survey of Housing Completions, and the Survey of Mobile Home Placements. These data series are collected by the Bureau of the Census and issued jointly by the Bureau of the Census and HUD in monthly, quarterly, or annual housing and construction reports.

The data on the production and marketing of housing and on the status of the housing inventory are used by analysts in financial institutions, by analysts in the construction industry, by the natural resources and materials manufacturing industries which supply the construction and remodeling industries, and by related industries such as home furnishings and utilities supplying residential energy needs. Other uses of the data include the preparation of the President's Annual Message on Housing Production, the President's National Urban Policy Report, and other reports to the Congress.

The largest project is the Annual Housing Survey, begun in 1973. It is a 1-in-1,000 sample of the total housing stock of the United States. Containing some 130 questions on a housing unit and its use, including the quality of the structure and its heating, plumbing and other systems, it provides heretofore unavailable detail on the housing conditions of American families and individuals. It also provides information on the deterioration and upgrading of units over time, on the present and former housing of families who have moved during the year, and on the quality and supply of vacant housing. The sample data are reported nationally, regionally, in and out of Standard Metropolitan Statistical Areas (SMSAs) and for rural and urban areas. In addition, within each of 60 SMSA housing markets, such data are reported quadrennially, one fourth each year. Detailed annual data for 1973 through 1977 are available and have been used for several important analyses. These include studies of trends in homeownership; the ability of younger families to buy new and existing houses; housing conditions faced by various population sub-groups; regional differences in housing costs; the relation of fair market rents to housing prices; probable need for housing construction and rehabilitation and for housing subsidies; and characteristics of those who must live in substandard or inadequate housing. The Survey is used for analysis of current housing conditions and to project future conditions. The data is the basis for the popular series "How Well Are We Housed?"

Research and Technology

HUD-funded monthly surveys of several lender groups are part of a comprehensive public and private series covering eleven major groups. This cooperative effort reports on almost all mortgage lending and commitment activity in the United States. The resulting data are made available to government agencies and the public through HUD issuances. Two surveys of mortgage lending and commitment activity by State and local public retirement funds are done by the Bureau of the Census. Two others -- surveys of private, non-insured pension funds and real estate investment trusts -- are done by the Securities and Exchange Commission (SEC). The SEC also conducts a complementary survey, in conjunction with the Mortgage Bankers Association of America, of activity by mortgage companies.

These uniquely comprehensive reports on mortgage lending and commitment activity are used by government agencies responsible for general credit policy, supervision of financial institutions, and housing credit policies. Data are also used by mortgage market analysts employed by banks and savings and loan associations as a guide to their own lending policies.

HUD plans to maintain the existing data series in 1980. Budget increases are due to rising costs, including federal salaries at the Bureau of the Census, despite some adjustments designed to reduce survey costs.

3.2 Housing and Financial Market Studies

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$2,746	$3,000	$2,500	$2,100

Research studies in the economics of housing and community development, and mortgage and related financial markets complement the continuing data surveys and provide critical, issue-related information for use both within and outside of the Department. The valuable data base provided by the Annual Housing Survey is used in a number of external as well as internal analyses designed to answer policy, program development and market analysis issues. Among these are measures of the need for rehabilitation and the suitability of the stock for rehabilitation treatment to reduce housing inventory losses; the socioeconomic characteristics of the new and existing markets; development of longitudinal data files to analyze changes in units over time; and the relationships between the characteristics of housing units and neighborhoods and the occupying household's composition, socioeconomic status, subjective satisfaction with the dwelling and neighborhood, as well as reasons for moving in or out of the dwelling unit.

Accompanying the increased richness of the data base is a concomitant increase in the computer costs of exploiting the available information. There are more opportunities for useful analyses, and the scale of data to be manipulated each time has increased greatly.

Most research in the area of tenure choice has found statistical correlation between income and tenure choice. In general, rising income engenders rising homeownership and a net migration out of metropolitan areas. Over time, this has reduced revenues per person in such areas and contributed to urban fiscal crisis. One proposed research effort would determine the extent to which income related change in tenure choice (with a related net urban-to-suburban migration) is the direct result of the combined impact of inflation and federal taxation.

One of the major financial innovations of recent years has been tax exempt mortgage revenue bonds. By providing below market mortgage funds, these instruments are intended to improve the supply of low- and moderate-income housing.

They also encourage upgrading and repair of residential structures, especially in aging metropolitan areas. Research in this area will attempt to determine the effects on supply of funds, the cost savings which may result from such borrowing and the impact on federal borrowing costs and revenues. This research is expected to have a major impact on proposed changes in federal taxation relating to such instruments.

An evaluation of the effects of the new alternative mortgage instruments, both conventional and insured by FHA, is needed. The initial focus of the research would be to determine to what extent such instruments have enabled savings and loan associations to compete for new funds during tight money markets.

IV. CONSUMER AND EQUAL OPPORTUNITY RESEARCH

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$4,398	$6,025	$5,625	$5,250

4.1 Fair Housing and Equal Opportunity

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$820	$850	$850	$900

PD&R, in cooperation with the Assistant Secretary for Fair Housing and Equal Opportunity, conducts research and demonstration activities designed to promote compliance with fair housing and equal opportunity statutes. The 1979 and 1980 workplans are based on the operational needs of the Department in its efforts to strengthen enforcement of the fair housing laws and on a draft research agenda developed in 1978. These efforts are complemented by a substantial amount of research reported in the evaluation (category 8.0), housing research (category 1.0), and displacement research (category 5.0) areas that are relevant to fair housing issues.

(1) Fair Housing Enforcement Demonstration. The premise of this demonstration is that local fair housing groups can be assisted by HUD to identify and rectify instances of housing discrimination, and that by working cooperatively, HUD and local groups can help assure greater compliance with the law. Local groups would provide knowledge about local problems and gather information through audit testing or other means. HUD will provide technical assistance and funding support to the local groups through a national organization, chosen competitively, with experience in fair housing. The national organization will assist the local groups, provide training and specialized technical assistance, and monitor their efforts and performance. The national organization will also be responsible for assessing the day-to-day performance of this cooperative effort of the local group. The demonstration project has begun and is scheduled for completion in 1980. The impact of the demonstration on the problem of housing discrimination will also be assessed through a separate independent contractor evaluation which will begin in 1980, and will be completed in 1981.

(2) Equal Opportunity in Lending Study. In 1979 a study utilizing data collected by two State regulatory agencies will examine the extent of discrimination in mortgage lending on the basis of sex, marital status, and race. The study is underway and is expected to be completed in early 1980. A previous study by Policy Development and Research established that lenders' rules-of-thumb concerning the stability and growth of women's incomes were likely to contribute to sex discrimination in the mortgage market. The 1979 study of lenders builds on this earlier work and will serve as precursor for future work on discriminatory practices by lenders.

(3) Housing Justice Study. This study, conducted by the American Bar Association, will examine special housing courts and other alternatives, such as small claims courts, which seek to provide more expeditious handling of tenant-landlord disputes, housing discrimination cases, and code enforcement cases. Information will be drawn from case studies of cities with and without these special judicial mechanisms. There will also be review and analysis of data collected

earlier on small claims courts, and a survey of 100 sample jurisdictions. Technical assistance will be provided to approximately 10 jurisdictions interested in establishing an alternative mechanism. The study is underway and will be completed early in 1980.

(4) Demonstration for Training Fair Housing Lawyers Through Clinical Seminars. Columbia University Law School is conducting a demonstration program for training law students to practice fair housing law. The demonstration will test whether the use of clinical seminars is successful in: (a) inducing law students to study fair housing law; (2) preparing them to practice fair housing law; and (c) providing immediate assistance in litigating fair housing complaints. Related research will assess the adequacy of remedies dispensed by the courts. The demonstration began recently and will continue into 1980.

(5) Planned Fair Housing Research. HUD recently completed a major paper on the status of research on discrimination and segregation in American housing markets. This paper summarizes existing research in fair housing in order to identify and set priorities for research initiatives. These initiatives would assist HUD in overcoming the direct and indirect effects of discrimination and segregation in American housing markets, and identify the causes and costs of discrimination and racial transition. They will also lead to new goals for fair housing, and the policies and research needed to realize those goals.

As an immediate outcome of the fair housing research agenda study, a number of research projects will be initiated in areas for which there exists relatively little knowledge. Accorded high priority on the research agenda are the following projects to begin in 1979 and 1980:

a. Role of "Housing Search" in Segregation. "Housing Search" is the term describing the process people use in deciding where to live and how they go about finding an acceptable place. Little is known about the extent to which households' lack of information and self-segregation tendencies lead to the observed level of segregagation. The role of search behavior by both minorities and the majority is to be studied in a project to begin in 1979.

b. Structure of the Real Estate and Rental Industries and Discrimination. It is unknown to what extent the levels of discrimination and segregation are affected by the structure of the real estate and rental industries. For example, little has been done to examine how sellers' prejudice affects the behavior of sales brokers, or how landlords' fear of economic loss affects their treatment of minority home seekers. Similarly, little is known of the extent to which the operation of multiple listing services constrains (or expands) the housing opportunities of minorities.

4.2 Housing Needs of Special Users

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$1,620	$3,000	$2,700	$3,500

The focus of the Housing Needs of Special Users Program is on the improvement of the provision of housing and housing related services to people who have special requirements caused by such factors as age, physical condition, cultural background or location in a rural environment. The research sponsored by this program seeks to identify impediments to independent living, to develop information about the need for the delivery of housing and special services, and to design and implement better techniques for their delivery.

Research and Technology

While the main populations considered are the elderly, the handicapped and rural residents, research is also sponsored on the needs of such diverse groups as Single Room Occupants, Indians and Alaskan Natives. The basic research questions addressed for all of the target groups are similar: What are optimal strategies for assisting special groups to obtain suitable housing? What service package is essential to the success of special housing programs? Are there special management or administrative issues which must be addressed? What funding mechanisms can be used to provide the housing and services? What changes of law or regulation are necessary?

Special emphasis in this research program has been placed on the housing needs of the elderly. A number of important research studies dealing with the problems of elderly housing have recently been completed, including "Low Rise Housing for Older People-Behavioral Criteria for Design", winner of a Progressive Architecture award, "The Evaluation of the Effectiveness of Congregate Housing for the Elderly", and "Property Tax Relief Programs for the Elderly". In addition, an in-house paper was prepared on housing options for the elderly, which includes a description of their current housing situation, an assessment of HUD's present efforts for the elderly, and suggestions for new programs to address unmet needs. Recognizing the need for a long-range research program for this priority area, considerable effort was spent in 1979 in the development of a research agenda on the problems of the elderly. The agenda gives specific attention to the elderly who live independently in private market housing but whose housing needs are not being met adequately. One agenda topic concerns the needs of the elderly concentrated in the older neighborhoods of the nation's central cities. We are seeking more efficient mechanisms for delivering assistance to them for protecting their well-being and for preserving the existing housing in which they live. Other topics include the degree to which the elderly remain in housing which met past needs but is now larger than their current needs, and the potential for government programs supporting various kinds of housing adjustments, ranging from better maintenance and repair to relocation.

Two of the projects to be undertaken in 1980 will help to respond to these, and related, concerns. A longitudinal study of the housing adjustments which people make in response to important age-related changes (such as loss of occupation and income, deterioration in health, and widowhood), conducted by the U.S. Bureau of the Census for HUD, will provide key data on the independent elderly which has heretofore been lacking. For example, this study will show how age-induced differences in physical ability affect the maintenance and repair activity of the elderly, how much time elapses between life events and housing adjustments, and confirms whether different major life events result in different housing adjustments. Such information will be extremely valuable in designing programs which are most efficient and responsive in helping elderly households, preserving the housing stock, and stabilizing neighborhoods.

A second project will be a multi-city demonstration and evaluation of home maintenance and repair programs for the elderly. Information is needed on the effects of such programs on the upkeep of housing and the stability of neighborhoods. We also need information on the administrative feasibility and costs of such a program if replicated elsewhere. Past experience with a small experimental home-maintenance program in Baltimore, which was evaluated in 1979, will provide a sound basis for planning the project, when this concept is expanded into a number of demonstration communities. Results of this two-year demonstration are expected in late 1981.

Additional testing will continue in 1980 of a model training program for potential sponsors of the Section 202 Housing for the Elderly or Handicapped direct loan program. The purpose of this training is to increase minority participation in the the Section 202 program. Also in 1980 there will be an evaluation of HUD's new program for delivering services to residents of Section 202 congregate housing projects.

Research and Technology

Another major section of the Housing Needs of Special Users program is devoted to the problems of housing the handicapped. The development of a research agenda for the handicapped will be initiated during 1979. 1980 will see the beginning of that work. Here, too, the emphasis will be on the development of more useful data on the nature of their problems and on strategies for dealing with those problems. One of the primary issues to be addressed in this research is how to help the handicapped remain independent in their housing situations.

Research projects continuing in 1980 include the evaluation of the success of the units developed under the Small Group Homes demonstration project, once handicapped persons are in occupancy. There will be a similar evaluation of the units developed under Housing's demonstration of housing for the mentally ill. In addition, the final results of a major study of the cost of retrofitting public housing for accessibility by the handicapped will be available in late 1979.

Another objective of Housing Needs of Special Users research is more effective delivery of housing and community development programs in rural areas. Included in the rural activities has been the development of a shared research agenda with the Farmers Home Administration and the Housing Assistance Council. Other activities have sought means for more effective delivery and utilization of existing programs and services in rural areas. During 1980 work will be completed on the evaluation of the two year Joint HUD/USDA Rural Housing and Community Development Demonstration. The project, conducted in the States of California, Colorado, Illinois, and West Virginia is testing ways devised by these States to provide housing and community development services for "hard to reach" rural populations. In 1980, work will also be underway on HUD's Rural Assistance Initiative program, being conducted in two States, North Carolina and Washington. This is a cooperative demonstration between local HUD offices and several selected small cities, counties, and local public and private institutions to determine how Departmental resources can be more effectively tailored to meet the special needs of rural areas.

Another project, to determine the extent of federal housing program coverage (and particularly the Section 8 program) as related to the housing needs in non-metropolitan jurisdictions, is discussed in section 1.2, Section 8 Research.

The Housing Assistance Council (HAC) continues to be successful in dealing with rural housing problems and PD&R support of their activities will be increased in 1980. Included in HAC's activities are: operation of a revolving loan fund for the development of rural subsidized housing, technical assistance and training on rural housing and community development programs; and, research and evaluation of rural housing issues. Funding has been increased from $725 thousand in 1978 1978 to $850 thousand in 1979. The 1980 estimate is $900 thousand.

4.3 Housing Counseling and Consumer Aids

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$1,952	$2,175	$2,075	$850

These activities involve Congressionally-mandated research on settlement costs and other costs of home purchase. Projects are designed in cooperation with Neighborhoods, Voluntary Associations, and Consumer Protection (NVACP), and include counseling demonstrations and research on improved land recordation systems, and a full-scale study of settlement costs leading to a report to Congress in mid-1980.

Research and Technology

A multi-year demonstration of "Protective Insurance Payments" (PIP) for homeowners in mortgage difficulties is underway. In addition, the 1980 Budget includes, under the Federal Housing Administration, a proposal to implement this program which has been renamed the Temporary Mortgage Assistance Program. Implementation was based upon preliminary results of the demonstration. Evaluation of October 1978 data indicates that approximately 33% of the mortgagors enrolled in the program have had their incomes restored and are again making payments on their mortgages and are repaying the mortgage payments advanced by HUD.

The program, mandated under Section 508 of the Housing Authorization Act of 1976, combines counseling, mortgage forebearance, and mortgage assistance payments. The demonstration will test the risks, costs, and benefits of providing homeowners with a means to prevent the loss of their homes due to temporary losses of income caused by unemployment, underemployment, or illness. Enrollment of a sample of about 50 homeowners in three demonstration cities began in March 1977.

Another research project responsive to Section 508 is a three-year prepurchase counseling demonstration and evaluation that will be completed in 1980. The principle objective of this project is to determine the cost-effectiveness of homeownership prepurchase counseling for unsubsidized and subsidized FHA-insured mortgagors in terms of reduced defaults and foreclosures. Preliminary information of its effects on home buyers will be available during 1979.

Legislation will be sought to make the Protective Insurance Payments program part of the National Housing Act to help mortgagors continue in ownership.

Consumer concern with high settlement costs led to the enactment of the Real Estate Settlement and Procedures Act (RESPA) of 1974. The cornerstone of the Act is a requirement that lenders provide buyers with advanced notification of settlement (or closing) costs to permit comparison shopping and encourage greater competition among those providing settlement services.

Sections 13 and 14 of this Act, on the other hand, represent an attempt to deal with some of the problems underlying high settlement costs. Specifically, Section 13 calls for a demonstration of one or more model systems for the recordation of land title information, which are to be designed to facilitate and simplify land transfers and reduce their costs. Section 14 requires HUD to analyze several far-reaching alternatives to the advance disclosure provisions of RESPA, including a lender-pay concept and direct regulation of settlement costs.

In an earlier segment of the work, there was a state-of-the-art study on land records, and several legal studies on the subjects of registration (Torrens), repetitive title searching, and legal constraints to title record reform. In 1978, HUD selected five jurisdictions to receive grants to demonstrate model title recordation systems. The five are Warren County (Ohio), Pinal County (Arizona), Middlesex Registry (Massachusetts), The City of St. Louis, and the State of North Carolina. One or more additional jurisdictions may be selected in 1979 to operate improved registration (Torrens) systems. The Torrens system has been in use in several States since the nineteen-thirties when there was a similar period of interest in land title reforms.

In early 1979, HUD began the Section 14 research. It included an examination of the advance-disclosure procedures and their effects on consumer awareness and shopping, as well as an analysis of such alternatives as direct regulation and lender-pay. The latter involves the payment of all settlement costs by lenders, who, because of the volume of their settlement transactions, presumably could exercise greater leverage than consumers in acquiring settlement services.

Findings from the Section 13 and 14 research efforts will be incorporated in a report to Congress in 1980, along with recommendations for further Federal action, if necessary, to deal with problems in settlement costs and practices.

V. COMMUNITY CONSERVATION RESEARCH

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$8,018	$11,175	$11,429	$3,050

Community Conservation Research examines neighborhood change and designs and tests intervention techniques to stabilize and preserve neighborhoods. This work broadens our understanding of the causes, processes and consequences of neighborhood change. It has the objective of developing appropriate and effective public policies for neighborhood stabilization. Among our priority questions are: (1) what factors lead to spontaneous reinvestment in urban neighborhoods; (2) what is the impact of demographic changes in the population, and the relationship of new suburban construction to the stability of inner-city neighborhoods; (3) what are the effects of reinvestment on the displacement of resident population; (4) what level and intensity of public programs are required to stabilize declining areas; and, (5) what is the leveraging potential of various forms of government assistance to stimulate matching private investment.

Four major demonstration programs are currently underway and will continue through 1980. Associated with each is an evaluation designed to assess the effectiveness of the program and to provide, where possible, a contribution to the understanding of the process of neighborhood change. These activities are the Urban Homesteading Demonstration program (UHD), Urban Reinvestment Task Force (URTF) Demonstration, Urban Homesteading Assistance Board (UHAB) Multifamily Sweat-Equity Demonstration, and the Multifamily Homeownership Demonstration.

Research concerning the management of distressed HUD-insured multifamily housing is discussed in section 1.3, because of its close relevance to the work of that section. Its funding, to be consistent with prior year reporting, remains in this section.

There are also many smaller related projects in this field for 1979 and 1980. These include: monitoring the Neighborhood Strategy Areas Demonstration, a study of the re-use of abandoned property, plus several projects on housing maintenance and rehabilitation, population mobility, the role of neighborhood organizations, and security and community design. The five demonstrations and all planned research in each of the other subject areas are discussed in detail below.

Neighborhood Preservation - Ongoing Demonstrations

(1) Urban Homesteading Demonstration Program. The Urban Homesteading Demonstration program, begun in 1975 pursuant to Section 810 of the Housing and Community Development Act of 1974, has been enthusiastically received by cities and homesteaders. It is now nearing completion.

As of April 1978 HUD had conveyed 1,861 properties to the original 23 demonstration cities; 1,509 homesteaders had been selected, 1,322 had received conditional conveyance of their homestead houses; in 1,713 cases rehabilitation of the homestead dwellings had begun; and 1,019 families had completed basic rehabilitation work and moved in.

During 1977 the program was elevated to operating status under the Office of Community Planning and Development.

A comprehensive, independent evaluation of the program is currently underway. The information provided by the demonstration and evaluation has influenced the design of the operating program regulations,

To date, four major reports have been produced under the evaluation. The First Annual Report was transmitted to the Congress in November 1977, and Second Annual Report in December 1978, and the Urban Homesteading Catalogue in December 1977. Another report, Baseline Analysis of the Urban Homesteading Demonstration, was recently completed and is awaiting publication. This report is a preliminary technical assessment of the program's actual impact, based on comparison data collected about the program. Future reports of the evaluation will focus on the neighborhood change in homesteading areas, the rehabilitation of homestead properties, property values and housing unit changes in homesteading areas, and a cost-benefit analysis of the program.

(2) Urban Reinvestment Task Force Demonstration Program. The Urban Reinvestment Task Force (URTF) Demonstration, was initiated as an Inter-Agency Agreement in 1974 by HUD and the Federal Home Loan Bank Board (FHLBB). It demonstrates two methods for neighborhood preservation, Neighborhood Housing Services (NHS) and Neighborhood Preservation Projects (NPP). URTF is designed to encourage home improvement and to stimulate reinvestment and mortgage lending in sound but declining neighborhoods. The objective of the NHS is to develop one specific, three-partner (citizen-government-lender) model for preservation operations which can be replicated in other cities and neighborhoods. The NPPs, on the other hand, represent a wider variety of intervention approaches, types of neighborhood involved, and issues addressed.

To date, 65 NHSs are in full operation in 54 cities and another 26 proggrams are currently under active development. At present, the URTF has 26 NPPs in operation and five have been replicated on a pilot basis.

The success and acceptance of the demonstration has been recognized in Title VI of the Housing and Community Development amendments of 1978. The Urban Reinvestment Task Force has become operational and is no longer a demonstration program of the Department and the FHLBB. A public corporation, the National Neighborhood Reinvestment Corporation will continue to carry out the functions of the URTF in supporting NHS and NPP programs. Beginning in 1980, the Corporation will request direct appropriations from the Congress.

A three-year evaluation of the activities and effectiveness of the URTF, with emphasis on its NHS programs, was initiated in 1977. The purpose of the evaluation is to examine in detail such issues as the organizational structure of the URTF, operating costs, and NHS implementation strategies. In addition, a major effort will be made to study the neighborhood impacts of the NHS program, including socio-economic changes in the target areas, effects of NHS activities on housing conditions and property values, and the effectiveness of NHS in leveraging private mortgage and home improvement capital. The evaluation was designed to maximize comparability with data from the Urban Homesteading Demonstration evaluation. These will provide an extensive information base on the effectiveness of various intervention strategies in a broad cross section of declining inner-city neighborhoods.

(3) Multifamily Sweat Equity Homesteading Demonstration. In January 1977, the Department of Housing and Urban Development awarded a grant to the Urban Homesteading Assistance Board (UHAB) in New York, to support a demonstration of multifamily urban homesteading. To date, HUD has committed approximately $4.8 million in Section 312 loan funds to support the costs of the rehabilitation of abandoned city-held buildings which, upon completion, will be cooperatively owned by the homesteaders. The labor component of the rehab work is being supported by the City of New York through a portion of its Comprehensive Employment Training Act allocation from the Department of Labor. The New York City demonstration is serving as the basis for the initiation of a National Multifamily Homesteading Program in 1979 by the Department.

A major in-house evaluation of the Multifamily Homesteading project was initiated in 1978 and will be completed in 1981. This assessment will investigate the operation and organization of the demonstration, as well as its impact on participating families and neighborhoods. Among the products of the evaluation will be an analysis of the third-party technical assistance model, a report on the role of the neighborhood-based sponsor, demographic profiles of the homesteaders and the neighborhood residents, an analysis of the direct and indirect costs associated with the sweat-equity rehabilitation process, an examination of the use of the 312 loan funds, and an assessment of the replicability of the demonstration.

(4) Multifamily Homeownership Demonstration. The 1978 Housing and Community Development Amendments to Section 305 authorized the Secretary to "conduct a series of demonstrations to determine the feasibility of expanding homeownership opportunities in urban areas and to encourage the creation and maintenance of decent, safe, and sanitary housing in such areas by utilizing techniques including, but not limited to, the conversion of multifamily housing properties to condominimum or cooperative ownership by individuals and families." (The amendment becomes a new Section 510 of PD&R's Title V, research authority.)

Pursuant to this mandate, in 1979, the Department will institute demonstrations in two New York City neighborhoods. These demonstrations will test the feasibility and value of homeownership as a vehicle for improving the physical, economic and social viability of multifamily housing for lower-income families.

The Department will also begin in 1979 testing and evaluating various forms of resident participation and resident-controlled ownership in HUD-acquired properties insured under Section 236. The subsequent demonstrations will build upon and expand this research to the distressed multifamily portfolios of private financial institutions and cities. The demonstrations will additionally explore the opportunities, capabilities, and limitations of multifamily conversions as a tool for the stabilization of deteriorated but viable urban neighborhoods. More significantly they will test:

-- the incentives for resident participation in the management, operation and ownership of rehabilitated multifamily properties;

-- the levels of support which are necessary for resident participation and ownership by low- and moderate-income persons;

-- the alternative forms of tenure and financing which broaden the opportunities and benefits accruing from homeownership for low- and moderate-income persons; and

-- the range of possible neighborhood benefits created by the directed use of alternative sources of equity capital.

Based upon 1979's preliminary experiences and findings, the demonstration of alternatives showing the most promise for low-income conversions and neighborhood stabilization are expected to be implemented in two new demonstration sites in 1980. Additionally, an assessment of the original New York City models is planned for 1980. This phasing of a series of smaller scale demonstrations is to test and refine variations in possible forms of resident-controlled ownership and new sources of equity capital for distressed multifamily properties before embarking on a full national demonstration.

Neighborhood Strategy Areas (NSA) Demonstration. The NSA demonstration program, administered by the Assistant Secretary for Housing, provides a set-aside of Section 8 Substantial Rehabilitation funds for selected cities and other units of

local government which participate in the Community Development Block Grant (CDBG) program. These funds are for use with the rehabilitation of multifamily housing in neighborhoods designated by the selected cities. The objective of the NSA program is to strengthen cities' ability to bring about neighborhood revitalization while avoiding displacement of lower income residents.

In 1979 PD&R will begin monitoring the demonstration program. We will systematically track and assess cities' experiences in meeting the responsibilities inherent in their NSA role and will identify particular characteristics that promote or hinder the program. Our analysis will examine how cities carry out the program, whether and how they develop the necessary administrative capacity, the relation of the city to the State housing finance agency, if any, and the degree to which NSA and CDBG programs are coordinated.

Re-use of Abandoned Property. A manual for "Municipal Re-Use and Management of Surplus Real Property" is being prepared under a research grant to the Center for Policy Research at Rutgers University. The project will examine the issues related to population decline in specific urban neighborhoods and the effects, such as housing abandonment, of such changes. The manual will be designed for use by local officials and will include material about the following: (1) past local programs for dealing with abandonment; (2) methods of inventorying abandoned properties; (3) strategies for the early acquisition and interim management of abandoned structures; (4) procedures for establishing re-use priorities and disposing of surplus property; and, (5) a case study of a local government program.

Housing Maintenance Rehabilitation. This research is to develop an understanding of the problems and constraints faced in rehabilitation of existing housing and to investigate the role of the public sector in stimulating the maintenance and renovation of housing in older urban and suburban neighborhoods. A concept paper on the rehabilitation of single family housing will be available in 1979. It will provide an organizing framework for research in this field. The concept paper will summarize existing knowledge on: costs of housing rehabilitation, the role of public rehabilitation standards, and the effectiveness of alternative rehabilitation programs.

A current study is examining the process and factors which influence the decision to rehabilitate. Available rehabilitation data from the Bureau of the Census' Construction Reports are being analyzed to identify the source of funds for rehabilitation and the kinds of rehabilitation activities which are most common. A statistical model will be developed of the determinants of rehabilitation investment decisions made by landlords which will include the availability of loan funds and the importance of owner expectations about the neighborhood. Another study which was recently initiated will use the National Bureau of Economic Research urban stimulation model to estimate the impacts of housing rehabilitation in two sample SMSAs. The study will complement and provide a cross-check for similar work completed for HUD in 1978 in which the Urban Institute's Housing Market Simulation Model provided estimates of the market effects of rehabilitation.

HUD has entered into a Memorandum of Understanding with the Canadian Government. A joint research project, tentatively entitled "Measuring Housing Quality and Rehabilitation Through Physical Inspection and Household Survey", will start in 1979 and will continue through 1980. The project will be jointly funded and administered. Both countries have housing rehabilitation and neighborhood revitalization programs which require more precise estimates of the quality of substandard housing stock and which could be saved by rehabilitation. The data will be used for policy formulation of program budgets and for establishing regional allocations of program funds. The direct purpose of the project is to develop and refine the use of the Annual Housing Survey (AHS) and its Canadian equivalent, the Survey of Housing Units (SHU), in the assessment of the physical condition and rehabilitation potential of urban dwelling units. The study will be used to revise and redirect AHS and SHU questions so that they can be better used in the evaluation of the rehabilitation potential of the urban housing stock.

Displacement Studies. Displacement research includes two major efforts: a ten-city revitalization and displacement study, and a single city case study.

The ten-city study attempts to document the characteristics of revitalization and displacement which occurs without government stimulation and to develop a system for recognizing these phenomena in the early stages. Initially, the study will utilize data from secondary sources to be supplemented by interviews with selected local government officials, realtors, and neighborhood organization representatives. Data will be assembled on factors such as housing costs, housing conditions, and the volume of property transactions. In the second phase, household interviews will be conducted in two of the ten cities. The survey results will permit comparisons between the new arrivals and long-term resident households, and will provide more direct information on housing costs and rehabilitation activity.

In a related effort, one of the ten cities will receive an intensive site analysis, based on surveys of inmovers, outmovers, and long-term residents. Special emphasis will be placed on identifying and locating outmovers to determine the circumstances leading to their moves, and their post-move housing conditions.

These sources of information on displacement will be augmented by in-house research on mobility patterns between and within central cities and suburbs. Annual Housing Survey data are being examined for the social and economic characteristics of each of four categories of movers (central city to suburb, suburb to central city, within central city, and within suburb) in order to identify significant differences. Information on such differences may be useful in predicting future trends in intra-metropolitan population movement.

Relocation, an issue closely related to displacement, will be the focus of a planned two-phased study. The first phase will summarize existing relocation policies, practices and issues, and will determine the feasibility of detailed relocation analyses through available records. The second phase, scheduled for 1980, will be an analysis of relocation activities under the Uniform Relocation Act.

Role of Neighborhood Organizations. The National Center for Urban Ethnic Affairs has been examining the role of neighborhood organizations in the development and initiation of neighborhood revitalization strategies. The focus of this project is on how community organizations move from a purely issue organizing program into one which includes active planning and development. The project was divided into two phases. The first studied how two community organizations had to develop revitalization programs; the second observed the actual initiation and operation of planning and development activities by two other community organizations in a demonstration program.

In 1978 PD&R initiated several research projects in association with the Assistant Secretary for Neighborhoods, Voluntary Associations and Consumer Protection. The projects sought to strengthen the capacity of neighborhood development organizations to develop and carry out neighborhood revitalization strategies. Projects included: a survey of the needs of neighborhood development organizations, the preparation of a guidebook for the conversion of multifamily buildings to cooperatives or condominiums, and the development of a means to locate and support small neighborhood development organizations. These projects will continue in 1979 and 1980.

Security Research Program. The primary objective of this research is to develop practical security methods for reducing crime and the fear of crime in housing developments and surrounding neighborhoods. Particular emphasis is given to the over two million units of HUD-assisted housing. Survey and planning tools previously developed under the program are now being disseminated to interested public housing authorities participating in the Department's Anti-Crime Demonstration and the Urban Initiatives program. A major evaluation of the Anti-Crime Demonstration was initiated in 1979 and will continue through 1980.

Research and Technology

A future initiative will integrate anti-crime activities with neighborhood revitalization and community development programs. Following a feasibility study, a demonstration is planned to make environmental ("defense space") security measures a requirement for HUD's assistance to neighborhoods.

Program manuals are being disseminated which describe how to provide assistance to actual and potential urban elderly crime victims. This builds upon an earlier evaluation of the six-city demonstration about crime victimization of the elderly, conducted by the National Council of Senior Citizens, in cooperation with the Administration on Aging, Community Services Administration and Law Enforcement Assistance Administration; program manuals are being disseminated which describe how to provide assistance to the urban elderly victim.

Community Design. Community design seeks improved planning and design of the physical elements of our neighborhoods. This includes the identification of needs, the correlation of needs with specific physical forms and the examination of alternatives.

Initiatives will be undertaken in the following three areas:

-- studies of specific relationships between environmental elements and the needs of residents, including physical, psychological, socio-political, economic, and environmental factors;

-- studies of the design process, covering design methods, design policy and regulations, design participation, and the physical development process; and

-- studies of the neighborhood in general, its role, environmental elements, and evolution.

-- inability to make maximum use of financial resources and to provide advance notice of future problems.

The financial management research strategy recognizes that local governments vary in their needs, abilities, priorities and current practices. It seeks to stimulate improvements across the broad range of jurisdictions. The program will stimulate and help meet demands on the part of local officials, and others, for financial data, including performance data, which can be used in support of sound policy and management decisions. The program also identified potential change in Federal and State laws and regulations to encourage more useful, current and understandable local government financial data.

Based on a study of needs, the program is concentrating on three high priority areas: State and federal oversight; integration of budgeting, accounting, auditing, and work performance measurement; and forecasting revenues and expenditures. Specific activities include: workshops for local officials; on-site interviews with users of local government financial data; on-site review and analysis of selected existing systems and practices; development of model State legislation; technical assistance and training material for local managers and staff on the use of financial information in management decisions; development of a financial management information resource center; and support of actions to implement State and local financial management improvements.

(2) Other Capacity Building Activities. In addition to financial management, other initiatives are expected to continue in 1980. In 1979 HUD funded several projects to update existing data on women and minorities in local government. Efforts will continue to assess the representation of minorities and women in the public service. Additional support will be provided to develop an analytic framework for assessing local government management capacity, and to continue and strengthen previous liaison with local government through the Urban Consortium and the Intergovernmental Science, Engineering and Technology Advisory Panel. This liaison maintains continuity and contacts with local government groups for continuing user input.

6.3 Economic Development and Public Finance

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$4,242	$1,750	$1,750	$1,600

HUD's research in this field assists States and local governments with the problems of development, private employment opportunities, revenue, and finance. Solutions to the urgent problems of housing, neighborhood decline, and loss of vitality of central cities depend directly on local economic development efforts that can attract private investment, generate employment and entrepreneurial opportunity, and sustain the local tax base. The current fiscal crises of many local governments underscore the interrelated need to improve local government finances and the efficiency with which services are provided.

(1) Economic Development. During 1978, the ten-city economic development demonstration co-sponsored by HUD, the Department of Labor, and the Department of Commerce, ended its two-year program. An evaluation of the demonstration will be available in late 1979.

A major new effort was the preparation of several Urban and Community Impact Analyses for the Department's new initiatives. Four of these analyses were prepared in 1978 and submitted to the Office of Management and Budget in accordance with the guidelines set out in OMB Circular A-116. Several other

VI. COMMUNITY DEVELOPMENT RESEARCH

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$9,295	$7,150	$6,650	$6,435

6.1 State and Local Policy Analysis

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$3,980	$4,500	$4,000	$3,820

The Housing and Community Development Act of 1977 continued the trend established by the Housing and Community Development Act of 1974. It increased State and local government discretion in allocating HUD housing and community development assistance. This increase in State and local government responsibility has led to a need for greater management and policy analysis capabilities. Such skills had not been widely attained under the earlier, narrowly-delineated categorical programs.

HUD's role, in the capacity building of local governments stems from its concern that limited federal funds be utilized in the most efficient manner possible. This objective can be best achieved by improving and strengthening general, overall local government management and organization methods and helping cities improve the delivery of services.

(1) Financial Management. Continuing through 1979 to 1980, the major emphasis will be to improve the financial management capabilities of State and local government. The problems which have existed in local government financial management were first highlighted for the public by New York City's difficulties. There have now been similar experiences in other cities and there are forecasts of difficulties in a number of others.

As a result of this attention, more cities feel the need to improve their financial management. States, too, have been drawn in because of their legal and regulatory requirements of local government financial management. While a number of local jurisdictions have made significant improvements, many local governments are operating with financial management practices and procedures which suffer from:

-- inability to provide current, accurate expediture and revenue data;

-- lack of integration between budgeting and accounting operations;

-- inability to provide financial information necessary for sound and effective administration;

-- inability to provide cost and performance information to support policy decisions;

-- poorly defined and conflicting regulations and standards which impede comparison and analysis; and

VII. ENERGY CONSERVATION AND STANDARDS RESEARCH

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$1,928	$1,400	$1,400	$1,900

7.1 Energy Conservation in Buildings

HUD APPROPRIATION

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$882	$750	$750	$1,400

DEPARTMENT OF ENERGY TRANSFERS

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
($8,617)	($10,000)	($5,000)	(...)

The conservation of energy resources in the construction and operation of housing is among the nation's highest research priorities for reasons of national interest, both economic and environmental. This program is concerned with investigating and analyzing new energy conservation designs, and where appropriate, encouraging their development and use in all types of existing and new residential structures, including mobile homes.

A major project has been the development of Energy Conservation Standards for New Buildings. The funds for this research have been and are anticipated to be transferred from the Department of Energy. Other Energy Conservation research described below employs HUD appropriated funds.

Major Areas of Activities

(1) Energy Conservation Standards for New Buildings. (DOE Funding) This program, initiated in 1977, delivered sufficient data to establish preliminary performance standards. The proposed regulations have been published, and public comments and statements have been reviewed and analyzed. The final Standards are scheduled to be promulgated by DOE in 1979, and the State jurisdictions will be expected to implement the Standards by August 1980.

Support for the update and revision of the Standards as well as continuing research on energy conservation techniques for the design profession will be provided. Sustained effort will be required to develop and resolve key technical issues and economic factors which are expected to arise during the next few years.

(2) Other Energy Research

a. Energy Standards for Existing Residences. The feasibility of implementing a requirement that all existing dwellings meet applicable energy efficiency standards before sale or transfer will be examined from a technical, economic and

administrative standpoint. Energy savings, cost effectiveness over the remaining useful life of dwellings, effects on credit and housing markets, administrative issues and alternatives to the requirements will be analyzed. This study is mandated by energy legislation recently passed by Congress.

b. Public Housing Energy Conservation Demonstration. Rising energy costs continue to place an increasingly heavy financial burden on public housing and on low-income persons who can least afford additional expenses. There are approximately 1,000,000 public housing units in the United States with about 3.5 million residents. Cost-effective energy-conserving measures applied to public housing could substantially reduce the total household energy consumed nationally. In addition, because public housing consists of many building types whose characteristics are shared with those in the private sector, a potentially large multiplier effect could be achieved from the research planned in this area.

c. Mobile Home Energy Conservation. Because mobile homes comprise 20% of all new housing starts, about 30% of all new single family dwellings, and about 95% of all residences priced under $15,000, there is a distinct need to determine effective energy conservation measures and to develop reasonable construction standards. Because a large portion of mobile homes are occupied by low- and moderate-income families, there is an additional need to reduce this energy use.

The Mobile Home Construction and Safety Standards Act requires that HUD establish such standards. The Energy Conservation and Production Act of 1976 imposes further requirements for Energy Conservation Standards for New Buildings.

During 1979, extensive research will be accomplished on the mobile homes' thermal envelope (walls, floor, ceiling, windows, roof, etc.) as well as on the performance of various heating and cooling systems. The result has been to develop, for the first time, standards based upon full scale field testing, laboratory analysis, and climatological modeling.

In 1980, HUD plans to investigate problems that result from condensation or "sweating" on interior walls, such as degradation of the structural envelope. Condensation is caused by improper ventilation, sporadic or unbalanced cooling, or, paradoxically, may be caused by too "efficient" a thermal envelope. Examination of non-conventional wall, floor and ceiling systems will also be made to determine their performance and fire-safety characteristics in mobile homes.

d. New Energy Efficient Systems. The demonstration and evaluation of new energy efficient systems for residential structures, including mobile homes, is an outgrowth of the research and demonstration program for Energy Efficient Residence No. 1. This phase was initiated in 1978 and may continue through 1983 and perhaps beyond. Houses will be designed for different geographical regions. They will include a variety of energy efficient systems, many of which are not now available, but which should become available to builders within the decade. An Energy Efficient Residence No. 2 will be constructed in the Washington, D.C. area as an instrumented demonstration. A mobile home demonstration to test methods of protecting plastic pipes from freezing in walls, floors, and roofs, will be conducted in a northern tier State. Technical systems manuals and energy efficient design manuals will be produced.

e. Effects of Energy Conservation Measures. The determination of the effects of energy conservation measures on residential structures and their occupants is particularly important with the implementation of Building Energy Performance Standards developed under Title III of P.L. 94-385. Health and safety should not be compromised in achieving the goal of greater energy efficiency. For example, there is clear indication that increased use of insulation may pose

problems including additional fire hazards, corrosion caused by flame-retardant, acid-based salts, and excessive moisture absorption and fungal growth. Each of these problems will be investigated and remedies sought.

f. Infiltration. Infiltration losses resulting from cracks in the building envelope account for a significant percentage of heat losses in residential structures. This project will aid in producing a design and construction manual to reduce infiltration losses to a minimum.

g. HUD Minimum Property Standards (MPS) Insulation Standards. The insulation standards of the MPS dealing with the minimum thermal insulation, thermal transmittance through walls, and maximum glass areas have been criticized as not being cost-effective. Planned research includes a cost/benefit analysis which balances savings in actual energy consumption against the initial capital and operating costs for structures using different construction methods in varying climatic regions. The results should generate recommendations for further revisions of the MPS insulation standards.

h. Neighborhood Energy Conservation Manuals. Neighborhood Energy Conservation Manuals will be assembled that contain valuable experience gained by neighborhood-based organizations in successfully developing energy-related programs and packaging federal, State, and local resources. This information will be shared with other groups including municipal officials, who are interested in replicating the projects. Self-help residential programs such as weatherization, solar heating, energy consumer protection and resident education would be contained in the case studies and "how to" manuals.

i. Mobile Home-Energy-Retrofitting. The need to examine the more than 4,000,000 used mobile homes for energy-retrofitting purposes, will be addressed. Preliminary studies indicate that such homes, built before enforcement of the federal mobile home standard in June 1976, often incur high heat losses and allow considerable air-infiltration into the home.

j. "The Energy Wise Home Buyer" Dissemination Program. The publication and distribution of "The Energy Wise Home Buyer" will inform and assist prospective home buyers in purchasing energy efficient housing. In addition to dissemination, HUD will encourage national real estate and home builder organizations to distribute this booklet to their clients. Articles featuring the contents of the guide will appear in the real estate section of newspapers and other "shelter" publications as another part of the dissemination program.

7.2 Solar Heating and Cooling

DEPARTMENT OF ENERGY TRANSFERS

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
($23,668)	($11,500)	($16,400)	($6,200)

HUD's activities in solar energy began with enactment of the Solar Heating and Cooling Demonstration Act of 1974 (PL 93-409). The current HUD program is operated as one element of the national program for solar heating and cooling of buildings under the overall management and primary funding support of the Department of Energy. The detailed responsibilities assigned to HUD in this program are set forth in the latest version of the report, National Program for Solar Heating and Cooling of Buildings, DOE/CS-0007. Costs to HUD of operating this program are limited to staff-related and administrative expenses.

Research and Technology

The HUD solar program has four principal areas of activity: residential solar demonstrations, development of solar standards and criteria, market development, and information dissemination.

(1) Residential Demonstrations

a. Integrated Projects. The central and most prominent activity is the demonstration of solar heating, cooling, and domestic hot water systems in residential applications. The program plan developed in 1975 called for five cycles of demonstration projects continuing though 1979, in line with the original limits of the National Solar Heating and Cooling Demonstration Act of 1974. The cyclic approach was selected to encourage continued innovation in solar energy systems and to involve additional builders and developers in the demonstration process.

Four cycles of awards have been made to date, involving over $19,650,000 in 474 grants, and providing for solar systems in 11,912 dwelling units. The solar demonstration grants cover the cost of solar equipment and, where installed, special instrumentation, but not other costs of the building. Solar systems used in the demonstration program must be ready for the market; these are not development projects. Projects are selected through formal, periodic competitions.

The program plan calls for a fifth cycle budgeted at $4,900,000. Detailed plans for the fifth cycle are still being developed because they will depend on the availability of funding to be transferred from the Department of Energy to HUD.

The HUD residential solar hot water initiative funded eleven States with particularly high electric rate structures where solar hot water could compete effectively with electrically heated domestic hot water. The $400 grants were provided homeowners who installed domestic hot water systems meeting HUD's standards and providing at least 50% of an average family's hot water requirements. This program was delayed in getting underway by the late publication of the HUD standard, by bad weather at many collector testing sites, and by price increases of a number of solar systems. It has been extended through 1979. By early 1979, over 3,000 residential units had been funded and installed under the State program and an additional 1,200 were under construction.

c. Passive Solar Design Competition. The high initial cost of active solar systems led to renewed interest in passive design use of solar energy in homes. While the concept of passive solar energy is as old as man's interest in housing, only recently have objective design and analysis procedures been developed to provide the technical basis for designing and building passive solar systems.

To identify and publicize the best in passive solar systems, HUD, with the cooperation of the Department of Energy and the Solar Energy Research Institute, conducted a "Passive Residential Design and Competition" during the summer of 1978, soliciting designs for new and retrofit passive solar installations and offering prizes and construction grants for the winners. Five hundred and fifty-seven applications were received; 145 new home designs and 17 retrofit designs were selected for prize awards, and 80 of the new home designs which will be built for open-market sale will receive construction grants. On the basis of this experience, HUD and the Department of Energy are reviewing ways to extend the passive solar program on a regional basis.

(2) Standards and Criteria. Working with the National Bureau of Standards (NBS), HUD published Interim Performance Criteria for solar systems and applications in January 1975. Using data from the demonstration program, development of definitive performance standards is now underway. HUD is participating

with DOE, NBS, and organizations in the standards community under the general direction of the American Standards Institute in the development of additional testing and material standards.

HUD promulgated Intermediate Minimum Property Standards for solar heating and domestic hot water systems in July 1977, as a supplement to the Minimum Property Standards. This document is currently being revised to reflect the information developed by the industry and from the demonstration program.

(3) Market Development. The principal objective of HUD's part of the national solar program is to encourage the housing industry to utilize solar energy systems and principles. Early studies identified many potential barriers and constraints to the use and acceptance of solar energy, including high initial cost, building codes and zoning regulations, absence of an industry infrastructure, and concerns about technical performance. In addition to supporting DOE programs in commercialization and technology transfer, HUD has developed a project analysis model, the Residential Solar Viability Program (RSVP), which provides information on the economic feasibility of proposed solar investments in the format used by residential builders, their lenders, and their customers.

To address the potential problems of solar access and planning for solar energy, HUD will publish three reports in 1979. Two are concerned with solar access in new developments, and provide guidelines to the public planning official on the use of existing land use controls to assure solar access. The third is a study of the legal issues involved in assuring solar access in existing built-up areas. A series of these reports address actual marketing practices used in the demonstration program, and the experiences of home buyers, builders, lenders, public officials, and others with homes built under this program.

(4) Information Dissemination. The National Solar Heating and Cooling Demonstration directed HUD to establish a National Solar Heating and Cooling Information Data Bank and undertake other information dissemination activities. This activity has been coordinated with DOE. The result is the National Solar Heating and Cooling Information Center, which provides a single Government point of inquiry on solar heating for the public. Over 340,000 replies were provided to inquiries received in the first two years of the Center's operation.

Other HUD information dissemination activities include preparation and distribution of reports on the residential demonstration program, exhibits at major industrial and trade shows, and support for state conferences on solar heating and cooling.

7.3 Utilities and Energy Systems

HUD APPROPRIATION

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$1,046	$650	$650	$500

DEPARTMENT OF ENERGY TRANSFERS

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$230	$100	$260	$150

Research and Technology

The Community Utilities research activities are focused on the development of on-site integrated systems that are innovative, practical, and conserve the use of resources, including fuel and water. The effort in 1979 is directed toward: (1) continuing the water conservation research initiated in 1978 and broadening it; (2) completing the analysis, evaluation, and publication of the data developed in the Total Energy Demonstration initiated in 1972; and (3) completing the reporting and dissemination of information about the Modular Integrated Utility Systems research developed earlier.

(1) Residential Water Conservation Research. This program responds to the need to develop data on residential water conservation and municipal supplies. The President, on July 12, 1978, directed a program of water conservation be embodied in the housing assistance programs of HUD, the Department of Agriculture, and the Veterans Administration. Insufficient effort had been extended on this type of research despite a predicted doubling of water needs by the year 2000.

Not only is there increasing water need but costs are rapidly rising, a trend which will continue. Cost increases result from the development of additional less accessible sources of supply, as well as the costs of increased treatment required by the National Drinking Water Quality Standards. The frequency of water shortages and the impact on both the individual user and the municipality can be reduced through the more efficient use of existing supplies. Real cost and energy savings (decreased fuel use) would result from decreased water processing distribution, heating and use. For these reasons, the water conservation research will be continued and broadened.

The research conducted in 1979 will include: (1) continued development of baseline information for the reduction of water use in the home (this information is needed for consumer aids and for State and local government code officials, standards bodies, and legislators); (2) presentation of water conservation information in a household water-use conservation handbook with recommended practices; and (3) initiation of action to collect information about water re-use/recycle to reduce community needs for fresh water, to understand social reaction and health implications of re-use and to develop possible acceptable re-use sectors.

Activity for 1980 will include: (1) the development of guidelines for water conservation and re-use in long-range planning; and (2) demonstrations of water efficient household systems and appliances in single-family houses, multi-family buildings, communities, etc., to illustrate the ways in which the practices could/should be implemented, and to document the benefits.

(2) Total Energy and MIUS Research. The MIUS program activities are based in part, on the successful HUD demonstration of a total energy system in a residential/commercial complex. At the Jersey City demonstration site, a total energy or co-generation system provides, from a single, on-site facility, all of the energy needs of the complex for electricity, heating and air conditioning, and domestic hot water. On this site, the heat byproduct from electric generation, normally wasted by discharge to water or the air, is recovered and used for the 486 dwelling units, commercial space, school and pool. The privately owned site has been in operation since 1974, with continous monitoring. The data gathered through 1977 has been evaluated and a comprehensive report on the operation is to be released in 1979. Other final reports describing the data and instrumental systems design and operation, and programming logic, will also be released in 1979.

In 1978 a feasibility study was completed for the integration of an incinerator with waste heat recovery at the Jersey City Total Energy Demonstration site. Construction of the incinerator is currently underway with completion scheduled in 1979. This solid waste energy recovery program is jointly sponsored by HUD and DOE. The incinerator for on-site trash has a projected savings of an additional 17,000 gallons of fuel annually at the site. Incinerator operation is scheduled for 1980.

a. Neighborhood Impacts and Benefits of Alternative CDBG Strategies. The first year of a four year study to compare how various CDBG funded activities and CDBG neighborhood strategies affect the housing stock and general quality on life in neighborhoods is currently underway. Attention will be focused on rehabilitation, residential redevelopment, and neighborhood facilities. A primary concern is the extent to which program benefits are distributed to low- and moderate-income households. Other major areas of study include an examination of the effects of citizen participation on the planning and implementing of CDBG programs, and an evaluation of the neighborhood strategy approach incorporated into the 1977 CDBG regulations.

There are large design and data collection costs associated with the start-up of this major evaluation effort. A disproportionate share of funds for the project is required over the first two years of the four-year effort. Surveying of a sample of households, local officials, and others who potentially affect or are affected by the CDBG program started in early 1979 in ten cities. These cities were chosen to represent a wide range of size and regional categories and program mixes. Some preliminary results of the study will be available in late 1979 in time to be used in the Congressional review of the CDBG program.

b. Brookings Monitoring Study. The second report from the Brookings study, Decentralizing Community Development, is now available for dissemination. This report describes how the decentralized decision-making process emphasized by the CDBG program (which contrasts with the more centralized process under the former categorical programs for community development) has affected the types of community development activities and the nature of local intergovernmental-HUD relations. The report also focuses on how the adoption of a dual allocation formula of funds for entitlement jurisdictions among States has actually affected the distribution of funds. Two additional reports which further examine the directions of program development will be prepared in the future, one on the program's third and fourth years and one on its fifth and sixth years. The Brookings Monitoring Study will continue through 1981 and will provide information on the evolution of the block grant program over a six year period. In particular, the project will be able to trace some of the effects of the 1977 changes in CDBG regulations and guidelines.

c. Evaluation of the CDBG Formula. As mandated by Section 106(K) of the Housing and Community Development Act of 1977, this study examines the Community Development Block Grant impaction formulas and the single-formula alternatives to the current dual-formula system. In addition, the study uses the Annual Housing Survey to determine whether pre-1939 housing is a good indicator of housing and neighborhood problems. It also uses twenty indicators of community development need to construct need indices for different cities so that the effects of various formulas in targeting need can be examined. The current dual formula exhibits a much higher level of targeting according to city need than the 1977 single formula it replaced. Evaluation of CDBG formula is an ongoing project.

d. Urban Counties in CDBG. As relatively new entrants into community development programs, urban counties are receiving special evaluation attention. A study to gather data and assess the performance of urban counties which are entitlement fund recipients under the block grant program will be completed in 1979.

e. Evaluation of CDBG in Small Cities. This study will assess how well the structure of the CDBG program for small cities allows them to to meet their community development and housing goals. Probable areas for examination include the ways in which the application process affects types of cities and projects which are funded, the extent to which projects benefit low- and moderate-income households, the relevance of housing assistance plans for small cities, and how requirements for compliance with national goals (in

areas such as affirmative action) affect program participation. Other possible topics for examination are technical assistance needs of small communities, and assessment of local government performance in planning and implementing Community Development programs, with an emphasis on determining the need for comprehensive programs and the ability of small communities to undertake them. This project will be completed in late 1979.

f. Evaluation of the Fungibility of CDBG Grants. The overall impact of the CDBG program cannot be determined until the Department knows the extent to which local governments substitute CDBG funding for community development expenditures they would have otherwise made in the absence of the program. An even more difficult question is the tracing of the non-community development use of local funding freed by such substitutions. Taken together, substitution and alternate use is what is meant by the term "fungibility". This study will attempt to develop a model for providing this information and will assess the "fungibility" of the suspended categorical programs. This work is scheduled to be completed in 1980.

g. Section 701 Evaluation. The Section 701 evaluation will expand on the CDBG evaluation in analyzing various aspects of the local planning process. In particular, it will examine specific planning techniques and citizen involvement. Efforts will be made to identify deficiencies in local data sources and planning techniques. Emphasis will be on the extent to which Section 701 has improved local planning and whether these improvements have affected the local community development process. Work on this project will begin in 1980.

h. Evaluation of HUD's Environmental Quality Policies. Environmental regulations have been criticized both as adversely affecting the timing and cost of housing production and as being ineffective in promoting a better living environment. In 1980, an evaluation will be initiated of HUD's environmental protection policies. The study will focus on two issues. First, HUD's environmental regulations and procedures will be examined in terms of the theory of externalities, the theory of exhaustible resources, and the theory of congestible public goods. Second, an effort will be made to quantify the major costs and benefits associated with environmental regulations. In addressing the benefits, this study will rely on the body of literature being developed and refined concerning the techniques for determining willingness to pay for environmental quality. It can be expected that the measurement of cost will be more straightforward. Examples are additional expenditures incurred by builders to meet environmental requirements, and those additional holding costs incurred because of the time involved in environmental review.

(3) Evaluation of Equal Opportunity and Consumer Programs. 1979 activity is continuing to concentrate on the important issue of the effectiveness of HUD Title VIII enforcement activity and on counseling. 1980 activity will expand the consumer program focus.

a. Fair Housing Evaluation. The Department is currently analyzing data collected during its Fair Housing Evaluation and will complete the analysis in 1979. The Fair Housing Evaluation is the first attempt to measure the extent of actual discriminatory acts against Blacks in housing markets, and the nature of this discrimination. This evaluation will provide information on: how frequently Blacks encounter discrimination in sales and rental markets; the forms of discrimination encountered; how the probability of encountering discrimination is affected by factors such as age, income, type of housing sought, and neighborhood sought; and how the level of discrimination is affected by HUD's Title VIII enforcement efforts. The Fair Housing Evaluation (audit) provided a baseline for the level and forms of discrimination prevailing at the time data were collected for the study. A repeat of the study is planned, making possible the measurement of changes in the level and forms of discrimination. Design of the second evaluation will begin in 1980.

IX. RESEARCH PROGRAM SUPPORT AND UTILIZATION

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$1,811	$2,200	$2,321	$2,700

9.1 Program Planning and Management

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$1,112	$1,200	$1,321	$1,200

Activities funded under this budget category provide support and management services for the research, demonstrations, evaluations, economic analysis, and policy development functions of PD&R. The activities include: (1) the continuous maintenance and upgrading of a research management information system, which produces a series of internal and external reports, including the quarterly progress reports to the Congressional Appropriations Committees; (2) the continuing development of program control and contractor reporting systems through which PD&R's Government Technical Representatives maintain control and supervision of contractors and grantees; (3) support for a modest amount of cooperative international research (4) longer-range planning which attempts to anticipate future research needs and directions; and (5) management tasks which cut across two or more research budget lines.

One of the cooperative international research efforts is the US/USSR Utilities Research Project. Under the US/USSR Agreement on Housing and Other Construction, the Secretary of HUD is the United States head of the Joint Committee on Cooperation. Six Working Groups are active and currently conducting a useful exchange of scientific and technical information on design and construction, with productive meetings of Working Groups and teams of experts, and the implementation of joint projects of mutual interest. Practical results of the cooperation have been achieved. The National Academy of Science through its Building Research Advisory Board in 1978 and 1979 has provided "Working Group 10.02, Utilities, HUD/PDR", and "Working Group 10.03 Building Materials and Components, HUD/Housing", with consultant and research services. Current efforts are centered on the development of technical papers on topics of use to both countries to be presented at three Joint Seminars in the US as well as in the USSR. Proceedings will be published in both countries for public distribution.

The United States and the USSR are expected to renew this agreement for 5 years from June 1979 through June 1984. Activity in 1980 will continue technical paper development and seminars of mutual interest, as well as exchanges of teams of experts. Active projects include Internal Systems for Utilities in Buildings, and External Systems of Utilities in Populated Areas. Disciplines covered include water supply, waste water, solid waste, fuel distribution and use, electric distribution and use, space conditioning (heating and cooling), controls, and street lighting.

9.2 Transferring Research Results

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$699	$1,000	$1,000	$1,500

PD&R is reponsible for developing and implementing plans and programs for encouraging the utilization of HUD-sponsored research results. Funding for 1979 reflects increased responsibility and activity. During 1978 PD&R began implementing a computerized service to provide bibliographic information on completed research. When complete, the system will provide 200-word abstracts, source availability, and other bibliographic information on all completed HUD-funded research. During 1979 this information service will be broadly announced and will start to provide responses to information inquiries and assist in routine distribution of research studies. Other dissemination activities in 1978 included broad distribution of over 50 research summaries to universities and research organizations, State and local governments, public interest groups, professional associations, and industry. In addition, over 130 research studies were published and distributed by HUD in 1978, and those reports not published by the Department were made available to the public through the National Technical Information Service.

To achieve more effective research utilization, PD&R staff will spend considerable time with Government Technical Representatives (GTRs) to work on specific dissemination plans for products which will be developed during 1979 and 1980. In this manner, existing information networks can be mobilized and appropriate mechanisms used to reach the variety of constituents HUD's research is intended to serve. Special techniques will be employed to inform constituents of the availability of reports, and to enable those interested to request copies rather than the more costly dissemination of reports themselves to wide but uncertain audiences. Flyer-type announcements with mail-back forms and one-page research summaries are among the techniques currently being used. The use of a support contractor in 1979 will assist in executing the dissemination arrangements once the plans are developed.

urban impact analyses of federal programs have also been prepared or commissioned. To coordinate these in-house efforts with the work of other experts and scholars, a conference on methodologies for assessing urban impacts took place in early 1979. Urban Impact Analyses have demonstrated important linkages between federal programs and local economic development patterns and will be continued.

Other recent efforts in this area include: a conference on retail location decisions; a study of industrial location decisions and their urban impacts; development of small area economic multipliers to assist in evaluating Urban Development Action Grant proposals; and a study of the economic development impacts of alternative public utility pricing mechanisms.

(2) Public Finance. Three publications resulting from HUD projects mark the Department's public finance achievements in 1978. A conference on urban fiscal problems, co-sponsored by HUD, the U.S. Conference of Mayors, and the Maxwell School of Syracuse University, was held in Syracuse, New York. The papers presented at that conference have been published in The Fiscal Outlook for Cities: Implications of a National Urban Policy, edited by Roy W. Bahl.

Two handbooks for local officials provide guidance on particular problems of local government. The Fiscal Impact Handbook, by Robert Buchell and and David Listokin provides a careful description of alternative methods of evaluating the local fiscal impacts of new land developments. Improving Real Property Assessment, by the International Association of Assessing Officers, provides local assessors with a reference manual for improving their assessment practices.

A significant new effort in public finance is the assembly of better data. The Assistant Secretary for PD&R chairs the new Interagency Task Force on Urban Data. Support of this task force combines in-house work and external research on fiscal data and other urban indicators.

New and continuing projects include studies of urban economic indicators, urban capital infrastructure conditions, fiscal impacts of local government pension systems, and a conference on the impacts of tax and spending limits on federal programs. In 1979 and 1980 the Department plans to examine federal tax policy and its urban impacts, both fiscal and developmental.

6.4 Environment, Growth and Land Use

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$1,073	$900	$900	$1,015

This research provides assistance to HUD staff, State and local officials, and the private sector in achieving an economic and safe use of land. Its goal is protection and enhancement of the human environment, during the process of providing needed housing and urban development.

Research and demonstration activities support Departmental responsibilities in environmental matters, natural-disaster reduction as it relates to HUD programs, and land-use planning. These activities also respond to specific mandates of the National Housing Act, the National Environmental Policy Act, and other legislation that provides authorization for HUD programs. Research products consist of guidebooks, information for policy and issue analysis, criteria for standards, proposed regulations and training materials. Prior to 1980, Departmental research responsibilities also included support of the Flood Disaster Protection Act and Disaster Relief Act. With the transfer of the Federal Insurance Administration and the Federal Disaster Assistance Administration to the Federal Emergency Management

Agency, HUD will not initiate any new research activities in support of this legislation.

Accomplishments in 1978 included the completion of work on air quality considerations in residential planning and housing site suitability. Joint EPA and HUD sponsored research on indoor air quality in residential environments was completed and EPA is preparing reports of the results. Research in support of the development of flood-hazard reduction standards, required by Section 406 of the Disaster Relief Act, was completed and transmitted to FDAA. Other projects completed include the role of local governments in new community developments, and barrier-free villages within new communities.

In 1979, an analysis of HUD's unique role in environmental research to support the Department's mission will be undertaken. The recommendations from the analysis will be utilized in planning future research needs and programs. Other 1979 research will include development of improved techniques for area-wide environmental assessment, the effect of hazardous waste disposal on HUD's programs, and completion of research into earthquake hazard mitigation standards.

In 1980, work will continue on community earthquake hazard reduction measures which affect HUD programs, landslide risk analysis, and on providing scientific and technical support of environmental and hazard issues to HUD program offices. Work will begin in the development of ventilation requirements for housing consistent with energy conservation, maintenance of suitable indoor air quality, and noise attenuation. Additional work will be done to improve environmental assessment methods and further work on special flooding problems will be pursued.

VIII. PROGRAM EVALUATION

ACTUAL 1978	BUDGET ESTIMATE 1979	CURRENT ESTIMATE 1979	ESTIMATE 1980
	(Dollars in Thousands)		
$3,545	$4,320	$3,620	$5,863

The Assistant Secretary for Policy Development and Research provides the Secretary, the Under Secretary, and other principal staff of the Department with an in-house capacity to perform a broad range of priority analytical research and evaluation support activities. This work includes: the preparation of quick response papers; outlines of new program alternatives for use by the program offices; actual initiation and demonstration of new policies; field investigations providing feedback on the impact and effectiveness and administration of HUD programs; surveys of the general public and of special samples; cost effectiveness and cost/benefit analyses of HUD programs; and rigorous evaluations of the success of HUD programs in achieving their objectives. While some these activities are accomplished by contract work, and a number of studies, particularly the shorter and smaller projects, are primarily carried out by in-house professional staff.

In other instances, there is a combination of contract services and in-house staff effort. For example, survey research services, performed by contractors are often used in conjunction with HUD staff in the conduct of short term policy studies and evaluations of HUD programs. The landmark 1978 Survey on the Quality of Community Life is typical of the type of resources that HUD staff continues to use in ongoing work.

Descriptions of principal 1979 and 1980 evaluation studies follows:

(1) Evaluation of Housing Programs. In 1979 and 1980 HUD, as part of its evaluation of housing programs, will continue its emphasis on the problems besetting many of the multifamily housing projects subsidized under various HUD programs. Research will also be initiated on income certification methods in housing, and the Department's new Urban Initiatives program.

a. Studies of Troubled Multifamily Housing Projects. In the last two years, the Department has conducted several in-house studies of the problems facing multifamily housing projects in HUD's major housing programs. The first study, completed in 1977, provided an early assessment of the impact and administration of the Section 8 Loan Management set-aside program, a program to improve the financial condition of multifamily housing projects experiencing difficulty. The second study, conducted in support of the Task Force on Multifamily Property Utilization, was a more comprehensive field investigation of the problems facing financially-troubled subsidized projects. It delineated the major categories of problems associated with default, assignment and acquisition, and estimated the number of projects and units in each of these categories. A third study was conducted in 1978 with the focus moving to HUD-insured, unsubsidized housing projects. This study delineated the major types of problems facing financially-distressed projects which are insured by FHA. In addition, it identified for further case study a set of projects (both subsidized and unsubsidized) whose present financial distress may be the result of poor project construction. Finally, a fourth study was conducted in 1978 in support of the Department's Urban Initiatives Program. The program is intended to upgrade the most troubled portion of the public housing inventory. On the basis of a national sample of public projects and a more detailed field study, an estimate was made of the number of projects and the types of problems facing them. HUD is currently engaged in efforts to better understand and deal with these problems that affect the viability of multifamily housing projects.

Work was begun in 1978 on the use of cash flow models to: (a) identify potentially troubled projects; (b) form the basis for an analysis of the factors influencing the risks in multifamily underwriting; and, (c) to provide guidance to HUD in deciding how to respond to the problems of a particular multifamily project. Preliminary reports include a review of the variables that cause default in multifamily projects, and a survey of all multifamily processing forms and data elements. The results from these efforts will form the basis for more extensive work in 1980. Work to improve the models for predicting the number of multifamily properties assigned to HUD in any given year will be initiated in 1979. This will apply a macroeconomic approach to predicting the number of projects, examining the effects of general economic conditions and initial project mortgage characteristics to predict the number of assignments.

b. FHA Mortgage Insurance. As a follow-up to its policy-oriented evaluation studies of recent years which dealt with FHA policy issues, HUD is conducting a series of studies designed to assist administration of the FHA mortgage insurance programs.

1. FHA Insurance and Racial Transition. In response to a request from the Assistant Secretary for Fair Housing and Equal Opportunity, an in-house study was undertaken of underwriting practices in the Cleveland metropolitan area to determine whether the FHA single family insurance programs were being administered in a manner which would promote neighborhood racial transition. The study concluded that the FHA was applying its underwriting criteria in a uniform manner across Cleveland neighborhoods and therefore not promoting racial transition. A report of the results is being prepared.

2. FHA Single-Family Default Risk. An extensive data set has been constructed and is currently being analyzed by in-house staff to determine the relationship between single family default risk and such factors as mortgage terms, the characteristics of the property, and the characteristics of the neighborhood. Work on the project will be completed in 1979.

3. Racial Integration and FHA Insured Multifamily Projects. HUD program data are being examined to determine the extent to which FHA insured multifamily properties are racially integrated, and how the degree of integration has changed over time. The work will be completed in 1979.

4. Evaluation of the Adequacy of Income Certification Projects. Work is underway regarding income certification and recertification policies under Section 8, public housing, and Section 236, to determine the extent of under-reporting of income and to identify cost-effective ways to improve reporting procedures. The income certification study is designed to complement the on-going evaluation of the overall effectiveness of Section 8 in providing housing assistance to needy families and individuals. The certification study of Section 8 and other programs is expected to be completed in 1980.

5. Urban Initiatives Evaluation. The study will examine the success of the Urban Initiatives program in improving both the physical condition and the general living quality of deteriorated public housing projects. The study will focus on the rehabilitation management component of the program and will consider both its short-run and long-run impact. Work has begun on the study and is scheduled to continue through 1979 and to be completed in 1980.

(2) Evaluation of Community Development Programs. Although evaluation efforts in this area are now concentrated in the Community Development Block Grant program, the focus will be expanded in 1980 to include Section 701 and the Department's environmental responsibilities.

b. Expansion of Fair Housing Evaluation to Hispanics. The Fair Housing Evaluation (audit) provided important information on the magnitude and nature of the discrimination problem faced by Blacks in the housing market. Similar information is needed on the problems experienced by Hispanics. A first step has already been taken by examining discrimination in the rental market of one city against Hispanics. The study will be expanded to other sites and other subgroups of the Hispanic population in 1980.

c. Price Differential Study. The Department is analyzing data from the Annual Housing Survey to determine whether prices paid by Blacks and non-Blacks for equivalent housing is the same or different. These results will be combined with the findings from the Fair Housing Evaluation to assess the extent to which price differentials are related to the existence of discriminatory barriers to housing for Blacks. This analysis will be completed in 1979.

d. Evaluation of the Outcomes of Title VIII Complaints. Profiles of the characteristics of both complainants and respondents in Title VIII complaints will be constructed. The profiles will be compared with information from the Fair Housing Evaluation to determine whether HUD receives a representative cross-sample of housing discrimination cases or whether certain classes of minorities or landlords and real estate agents are over-represented (or under-represented) in the complaints HUD receives. Successful conciliations will be followed up to determine whether respondents are abiding by the agreement and whether the complainants received the requested housing. Unsuccessful conciliations will be followed up to determine what additional efforts complainants used to exercise their rights. The project is in its early design stages, with work scheduled to proceed throughout 1979 and 1980.

e. Default Counseling Evaluation. The Department is continuing its effort to provide data and information on the impact and cost-effectiveness of default counseling. Evaluations of the Detroit Default Counseling Demonstration and the twenty-one city, Section 235 Default Counseling program will be completed in 1979.

The Detroit effort involved the counseling of unsubsidized and subsidized homeowners--for the first time--while the Section 235 program was restricted to subsidized families. These studies involve the largest data bases ever developed for default counseling evaluations and are expected to provide meaningful input into the design of the Department's default counseling program.

f. Evaluation of the Long-Run Impact of Counseling. Most default counseling studies have a common weakness: they examine the experiences of counseled and uncounseled defaulters only a few months after counseling. A comparison of their experiences after two or more years would be more relevant for assessing the cost-effectiveness of counseling. By 1980 it will be possible to do this using the data collected in the earlier studies. A study on the long-run impact of counseling will be initiated and completed during 1980.

g. Pre-Purchase Counseling Evaluation. The second part of the Department's pre-purchase counseling demonstration will begin in 1979. The first part, which was initiated in 1978 in three communities, focuses on consumer education and counseling prior to the time that an individual has located a new home. The second part will provide counseling opportunities, on a voluntary basis, to persons in nine communities who have located a home and have applied for FHA mortgage insurance under Sections 203(b), 221(d)(2), and 235 revised. Continuing through 1980, this demonstration is being done in conjunction with the Assistant Secretary for Neighborhoods, Voluntary Associations, and Consumer Protection. The effort will be managed and monitored by in-house staff, and we will evaluate the impact of counseling to determine whether it results in reduced foreclosure rates,

whether more intensive, individual pre-purchase counseling is more effective than less intensive, group session counseling, and whether any level of counseling is cost-effective.

h. Evaluation of the NVACP Youth Employment Demonstration. Under a grant from the Department of Labor, NVACP is administering a demonstration program in which community groups receive CETA funds to employ youths to perform projects of value to the neighborhood. This evaluation will investigate the value of the program for the participating youths and for the neighborhood. Its primary focus will be on the relative effectiveness of this mechanism for dispersing CETA funds. The results of the evaluation will be available in 1979.

i. Interstate Land Sales Registration Program Evaluation. This study will examine the frequency with which misinterpretation of the property report occurs or more generally, examine information about the extent of disillusionment following interstate land purchases. In the case of non-delivery on promises by the developer, there are underlying issues. (Issues of fraud are pursued by the Office of Interstate Land Sales.) The study will examine the determinants of such non-delivery, taking into consideration site characteristics and developer characteristics, in order to identify the risks involved in interstate land purchase. Secondly, the study will examine the nature of the losses incurred in these cases. This is necessary in order to determine the amount of compensation which an insurance system, if one were established, could provide. The analysis, as a whole, will contribute information as to whether an insurance system is feasible, what criteria would be appropriate for endorsing sellers, and what site criteria should be adopted. The project is scheduled to begin in 1980 and continue through 1981.

In addition to the projects listed above the Department is undertaking a variety of evaluations of actual programs or of program funds that are being used in various demonstrations of new programs. These activities include the Urban Homesteading Evaluation, evaluation of the security component of the Urban Initiative program, evaluation of Section 202 deinstitutionalization of the chronically mentally ill demonstration, and an evaluation of the Urban Development Action Grant program. These activities represent an additional $3,425,000 of evaluation funding in 1979 and $2,450,000 in 1980, not included in the funding of this section.